

# Welcome to session on Tableau (Data Visualization)

# DATA ANALYSIS

# Data Analysis is process of

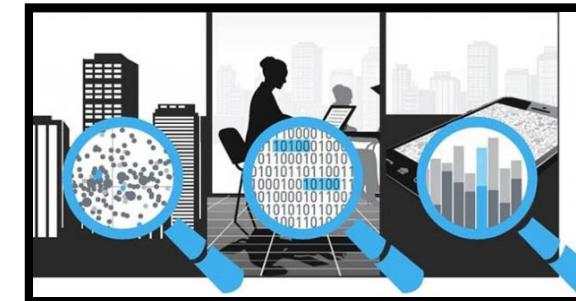
- **Compiling**
  - **Analyzing** data for decision making
  - Generating **real time** outcomes



## RAW DATA

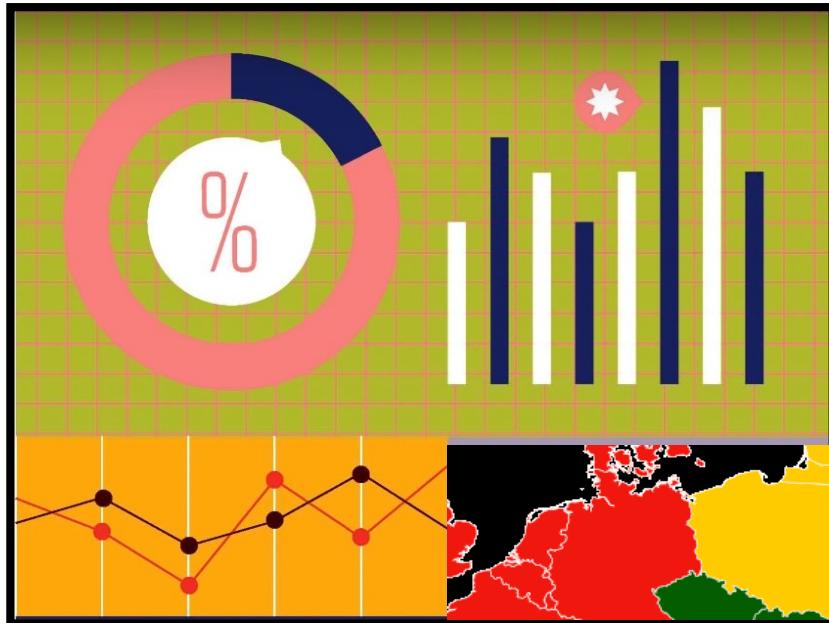


## **COMPILED DATA**



INSIGHTS

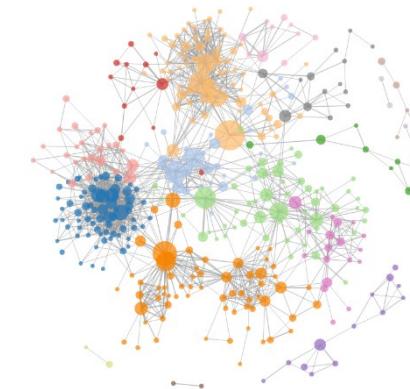
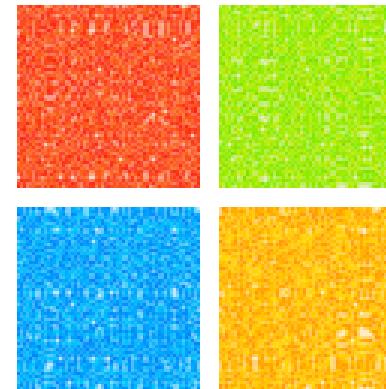
# Data Visualization



- Provides **Insights** into **Complex** datasets
- Communicates their **Key** aspects in meaningful way
- Provides **required** information in easy way
- Best platform for **Presentation**

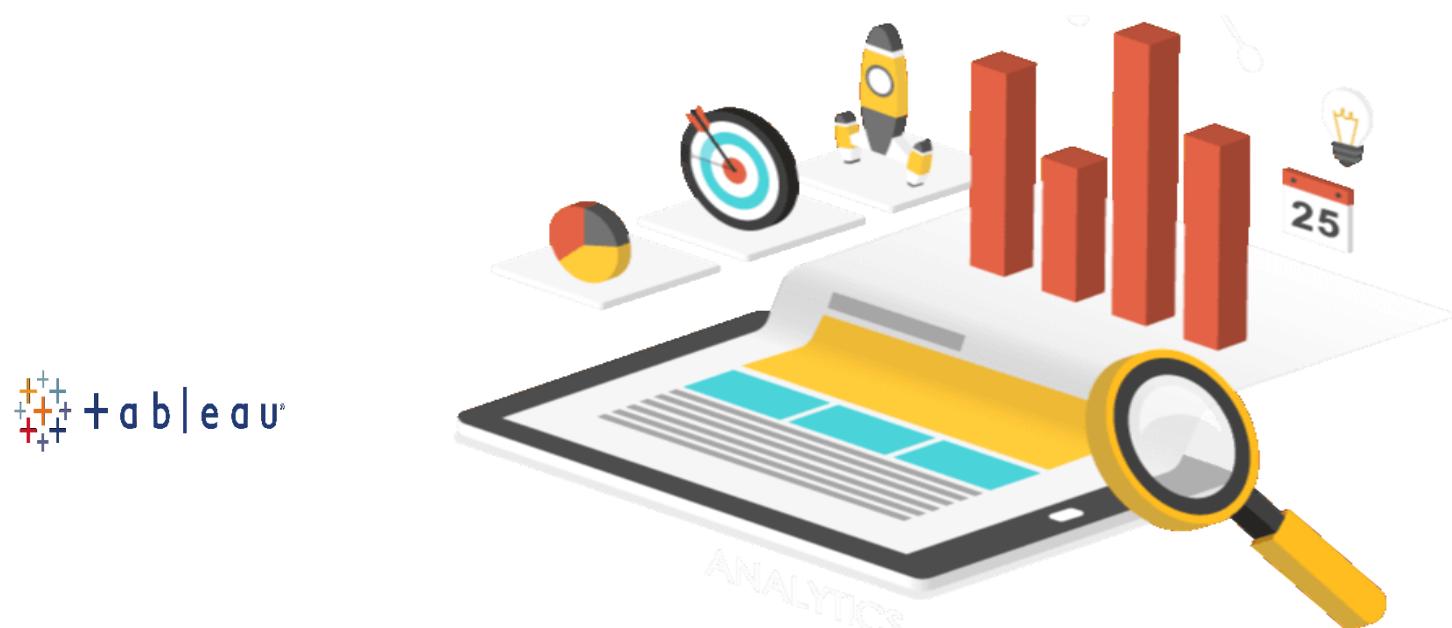
# How we distinguish parameters in Visualization ?

- Color
- Shape
- Size
- Proximity

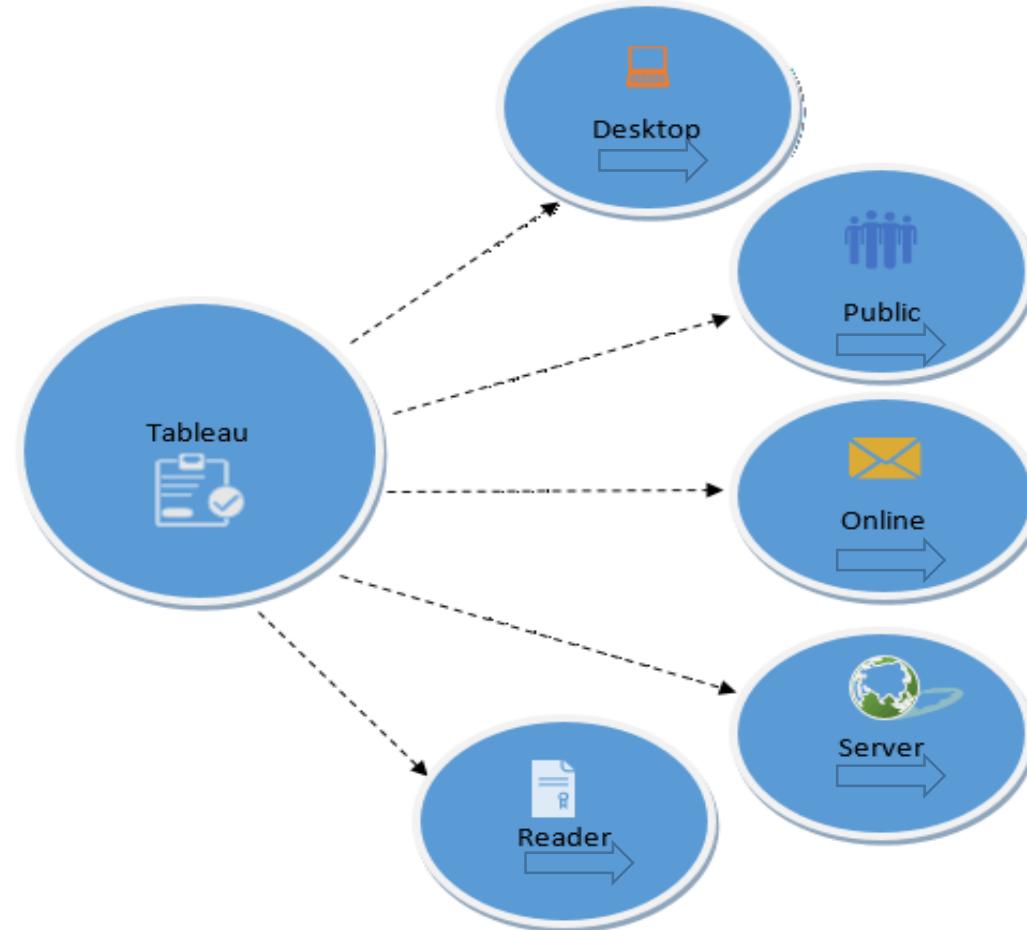


# What is Tableau ?

A **Data Connect** and  
**Data Analysis** tool using **Visualization** technique .



# Types of Tableau



# Tableau Product Suit

	Desktop		Reader	Server	Public	Online
Details	Personal	Professional				
- Local client for building dashboards	- Local client for building dashboards	- Local client to view and interact with local files	- Privately managed Tableau Server (may be on premise or service hosted)	- Essentially a massive, public non-commercial Tableau server	- Private version of Tableau Public eliminates need for infrastructure	
- Limited data sources, no ability to connect to Tableau Server	- Full enterprise capabilities	- Unable to modify workbooks or connect to server	- Users may directly interact with dashboards via browser	- All data published is public	- Live connections currently only possible with Google BigQuery and Amazon Redshift	
OS	 	 	 		N/A	N/A
License	\$999	\$1,999	Free	Named User or Core Licensing	Free	\$500/user per year

John Mathis

# Software Installation : Hardware Requirements

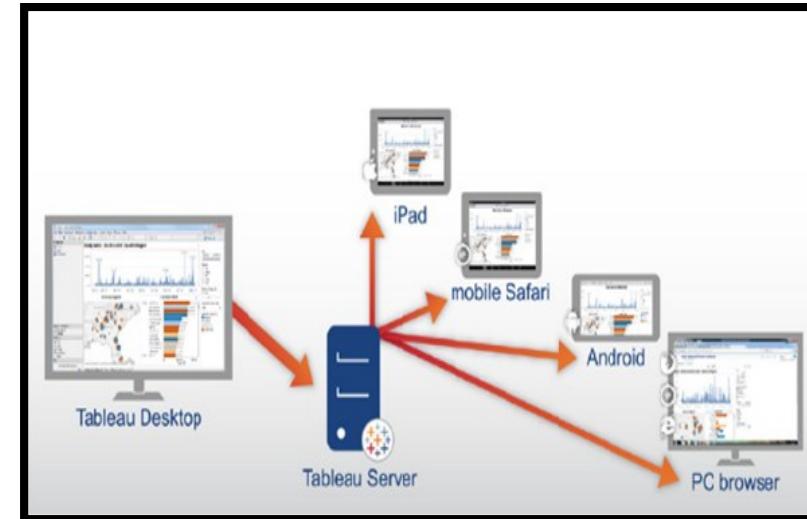
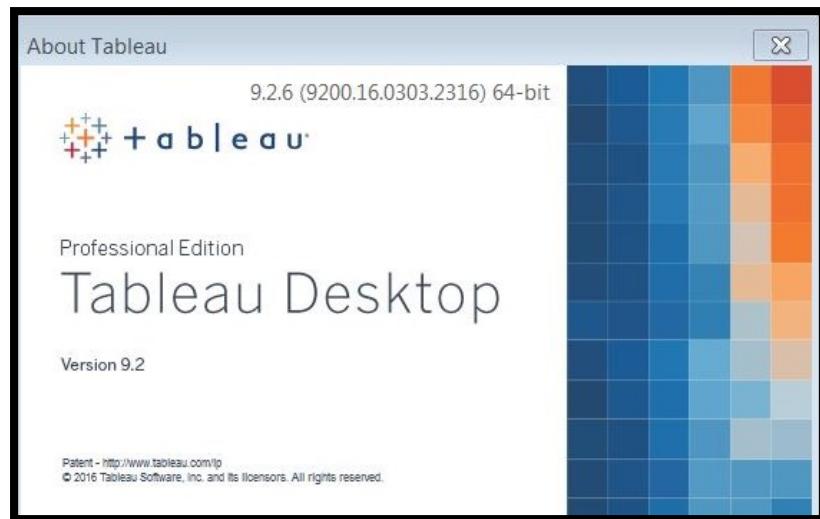


## **Hardware Requirements :**

- 1.8 core, 2.0 GHz or higher processor.
- 2.64-bit processor architecture.
- 3.32 GB memory.
- 4.50 GB disk space available.

# Software Installation

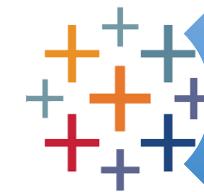
Click on the link for Tableau public desktop installation [here.](#)



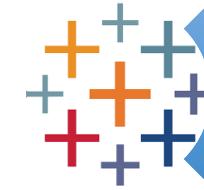
# Tableau

## (Data Visualization)

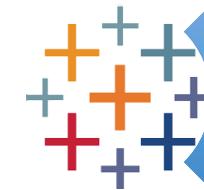
# Tableau Desktop



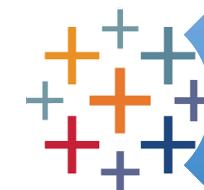
**Explore and Visualize** your Data in minutes.



Combine **Multiple Views** into a dashboard.

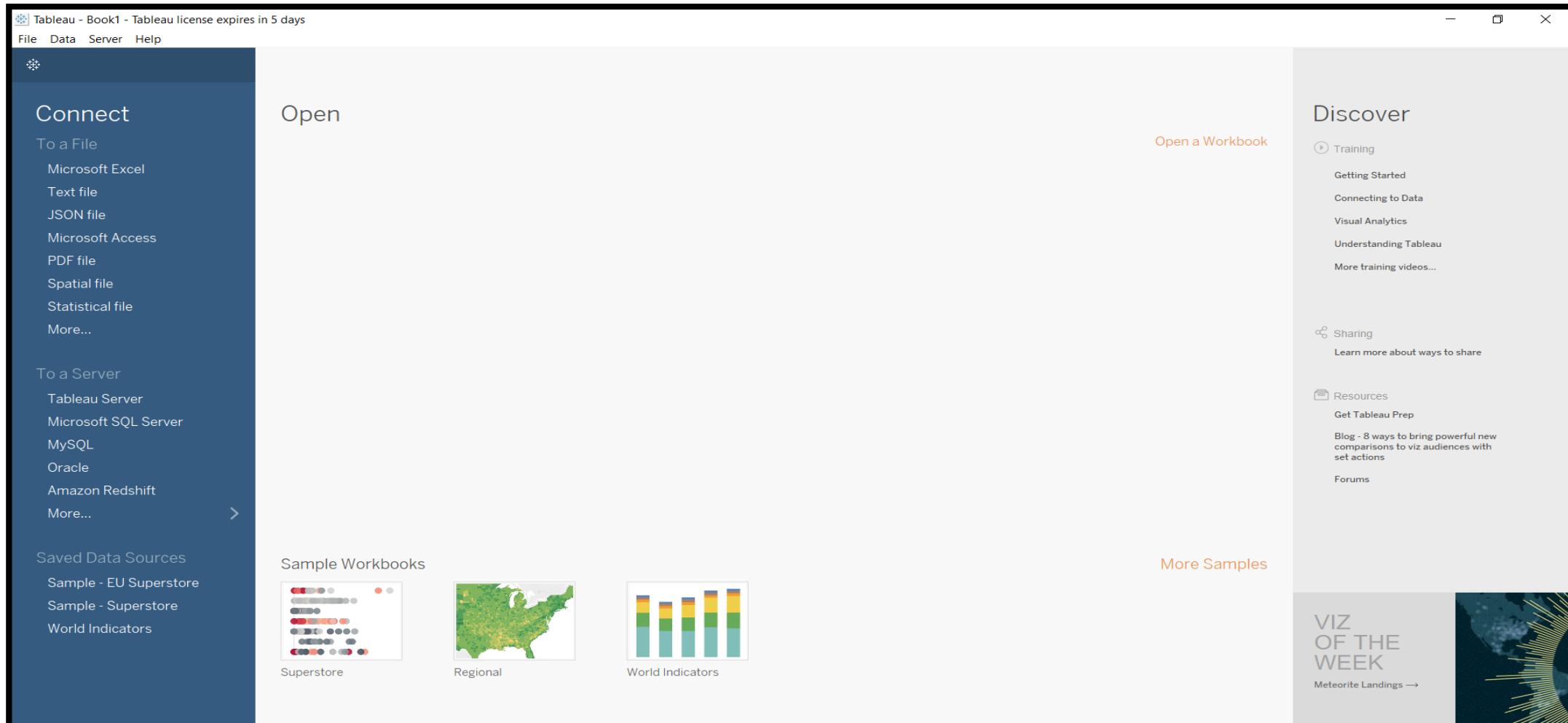


Work with **Spreadsheets ,Databases** or **Largest data** available on your system

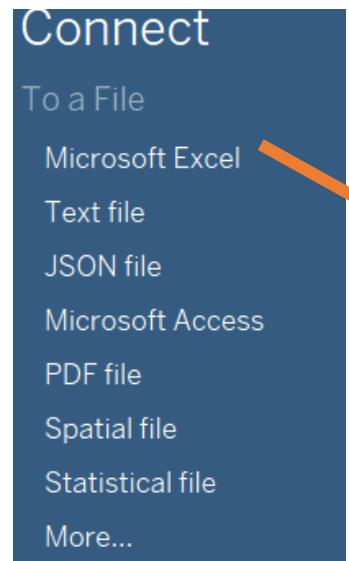


Easy to Learn and Use

# Tableau Desktop

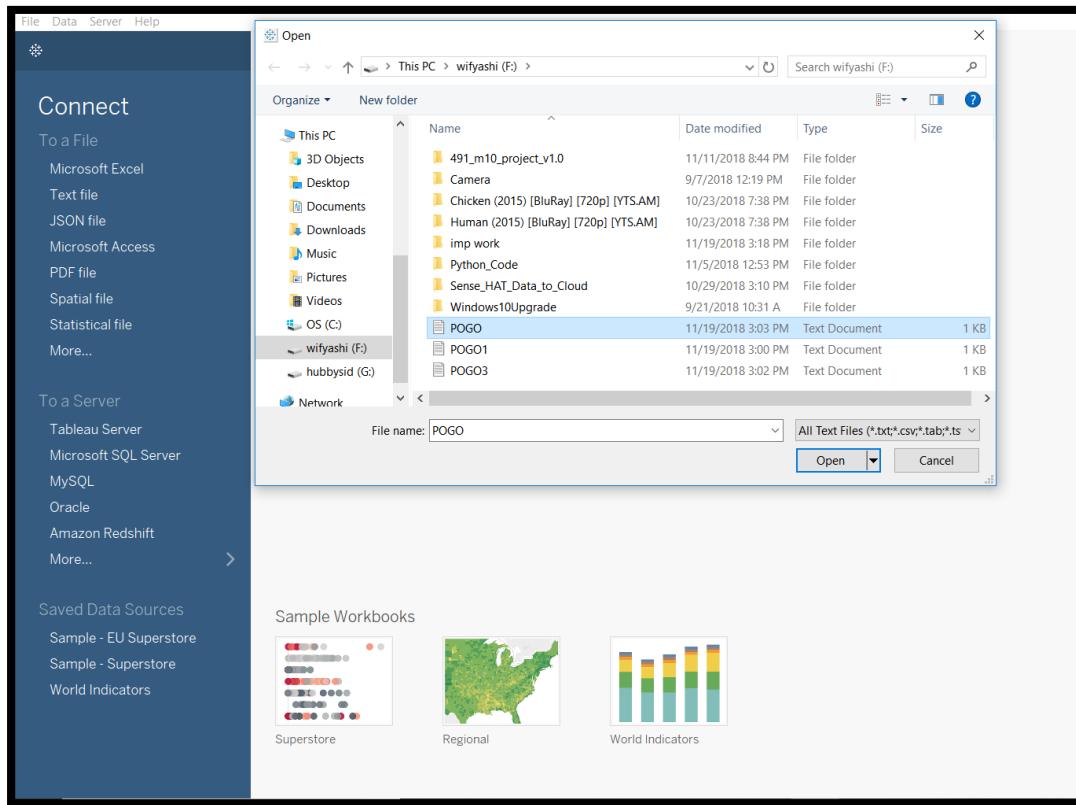


# Connect to Data Sources



The screenshot shows the Tableau interface with a dark blue header bar. The title 'Tableau - Book1 - Tableau license expires in 5 days' is at the top. Below the header, the 'Connect' dialog box is open, listing the same file types as the previous screenshot. To the right of the dialog, the main workspace is visible, featuring a large text box with the text: 'Connect to Data in various formats by Drag and drop'. Below this text are three sample workbooks: 'Superstore' (a scatter plot), 'Regional' (a map of the US), and 'World Indicators' (a bar chart). There are also links for 'Open a Workbook', 'More Samples', and 'File Data Server Help'.

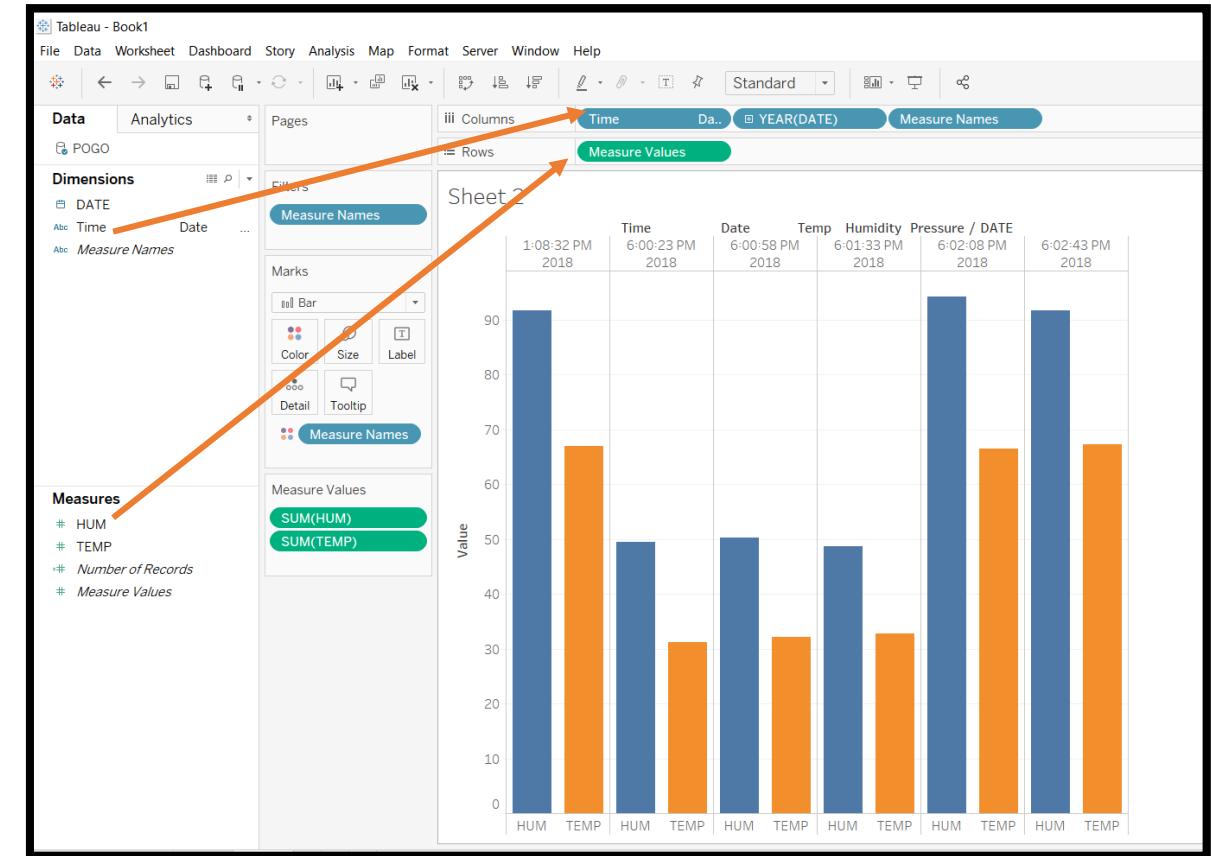
# Browse for file type and open



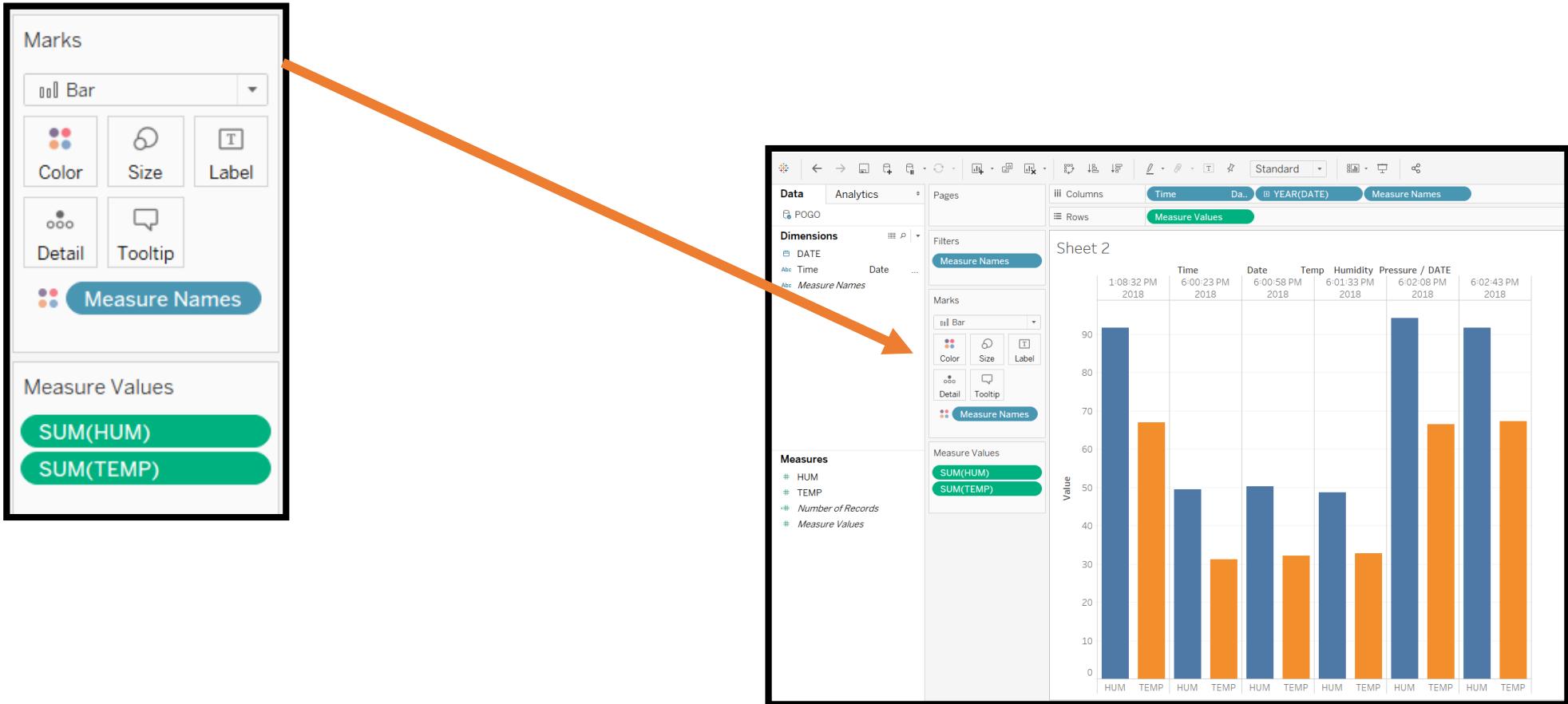
## Mobile Rating



# Add Columns and Rows : Simple Drag & Drop



# Use Cards to Custom Visualization



# Use Show me to select different Visualizations

The image shows a Tableau interface with two main components. On the left is a worksheet titled 'Sheet 2' displaying two bar charts. The top chart has 'TEMP' on the y-axis (0 to 70) and 'Date' on the x-axis (2018). The bottom chart has 'HUM' on the y-axis (0 to 80) and 'Date' on the x-axis. Both charts have 'SUM(TEMP)' and 'SUM(HUM)' in the rows shelf. Above the charts are 'Columns' and 'Rows' shelves with 'YEAR(DATE)' and 'Time' selected. A 'Show Me' button is visible at the top right of the worksheet area. On the right is a large 'Show Me' panel titled 'Show Me' with a grid of visualization icons. An orange arrow points from the 'Show Me' button in the worksheet to the 'Scatter Plot' icon in the grid. Below the grid, text reads: 'For scatter plots try 0 or more Dimensions 2 to 4 Measures'.

# File types

The result of data analysis in Tableau can be saved in **various formats**.



# Tableau Terminologies

## Measure

- A field of data that holds numeric and quantitative values as aggregated members

## Dimension

- A field of data that holds discrete data such as non-aggregated members

## Extract

- A saved subset of a data source to improve performance and analyze offline

# Tableau Terminologies

## Workbook

- A file with .twb extension that contains one or more worksheets, stories and dashboards

## Worksheet

- A sheet where user build views of data by dragging fields

## Rows Shelf

- A shelf at the top of the workbook that user can create the rows of data

# Tableau Terminologies

Filters Shelf	Format Pane	Level of Detail(LOD) Expression	Marks
<ul style="list-style-type: none"><li>• A shelf on the left of the workbook used to exclude data from a view</li></ul>	<ul style="list-style-type: none"><li>• A pane of formatting settings that control the entire worksheet</li></ul>	<ul style="list-style-type: none"><li>• A syntax that supports aggregation at dimensionalities other than view level</li></ul>	<ul style="list-style-type: none"><li>• A part of the view that visually represents one or more rows in a data source</li></ul>

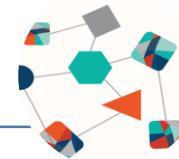
# DATA METHODS



CUSTOMIZATION



EXTRACTION



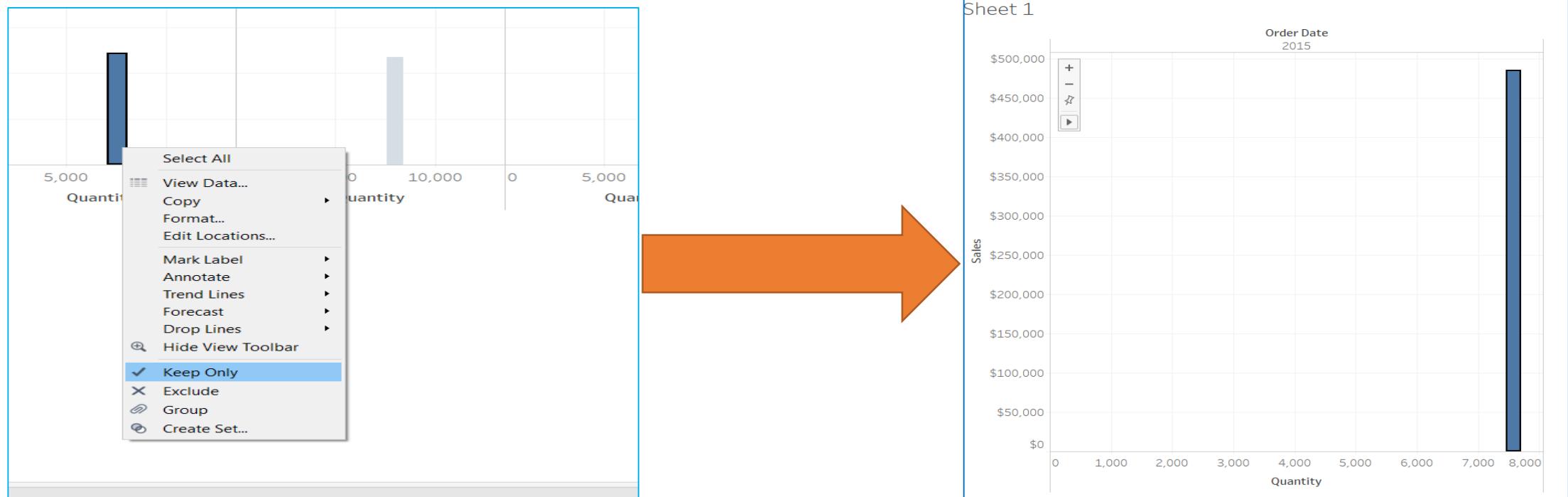
JOINING



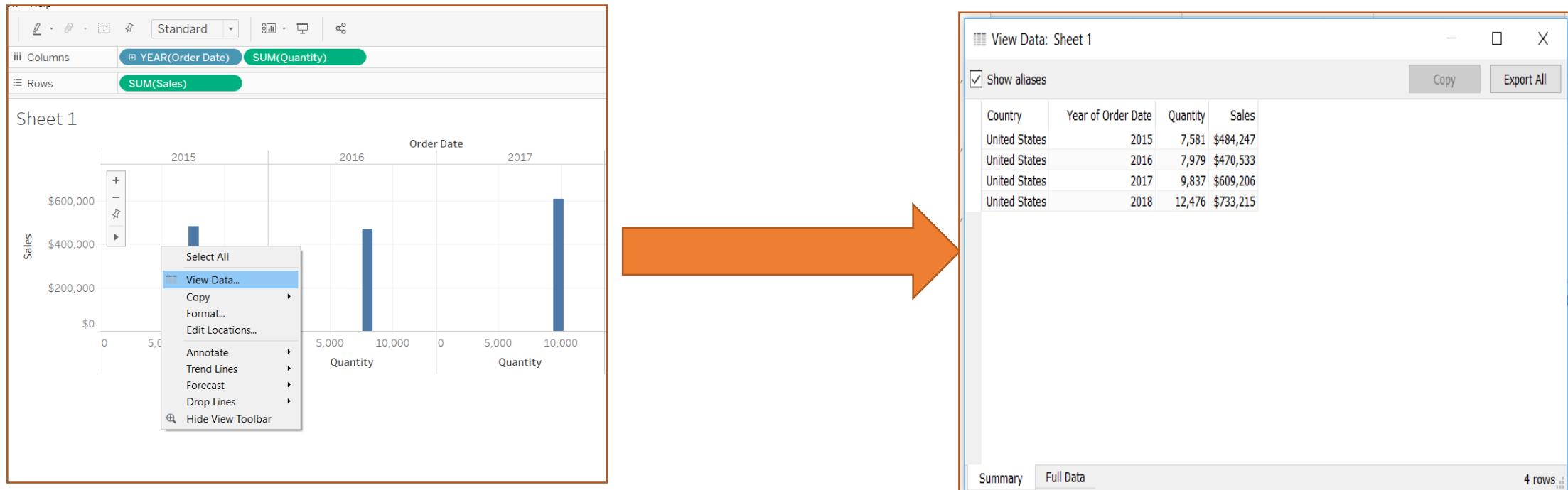
BLENDING

# Customization of Data

To extend the normal data views with some additional features

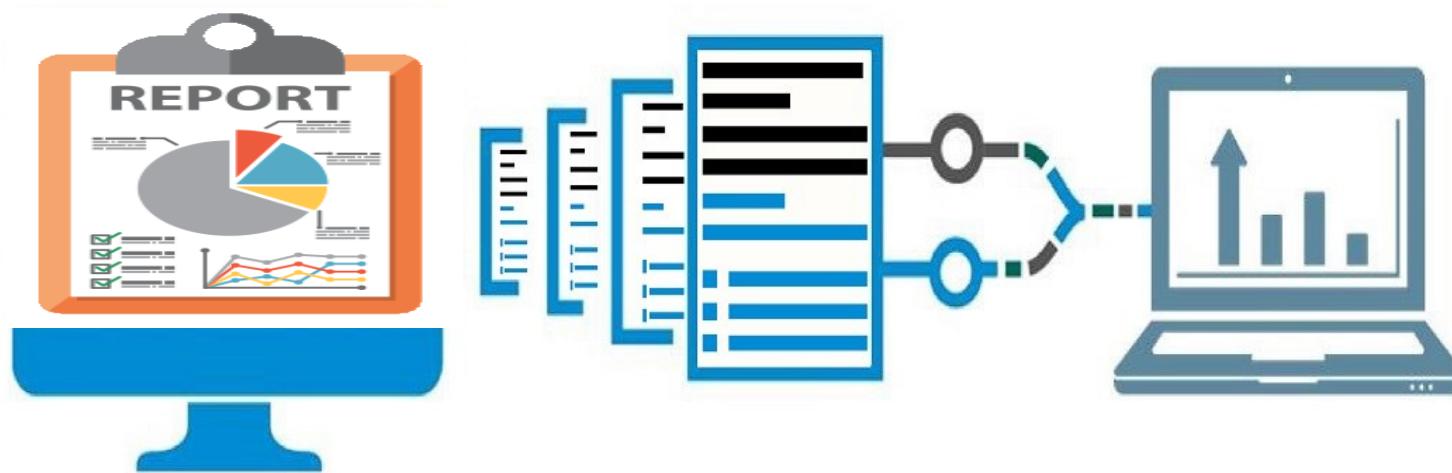


# View Data for a particular Graph point



# Data Extraction

- To analyze specially few Mobile brands
- **(Data Extraction)**



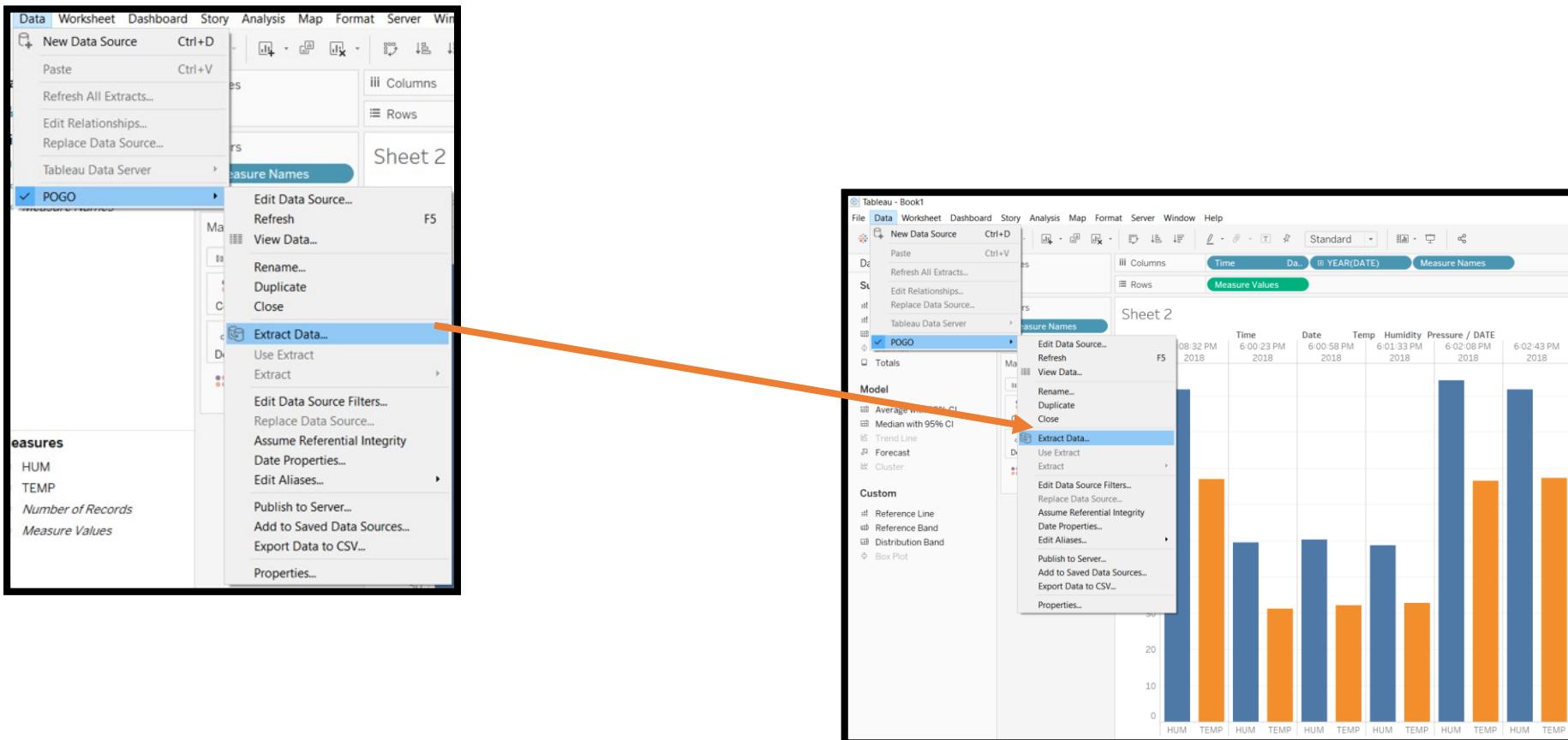
# So What is Data Extraction ?

**Data extraction :**

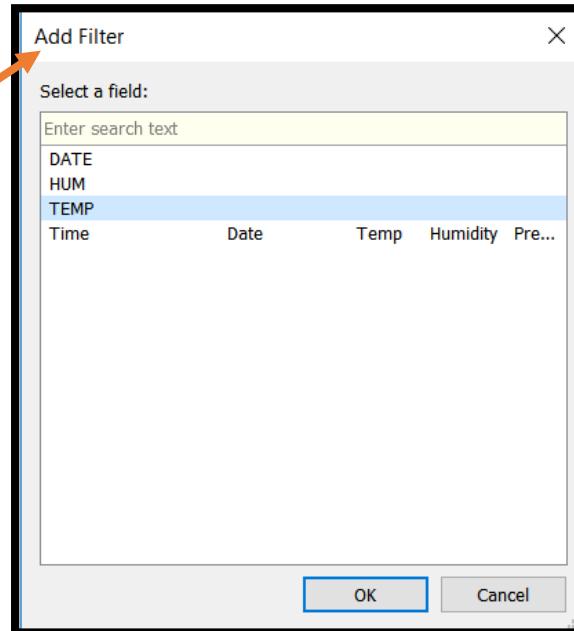
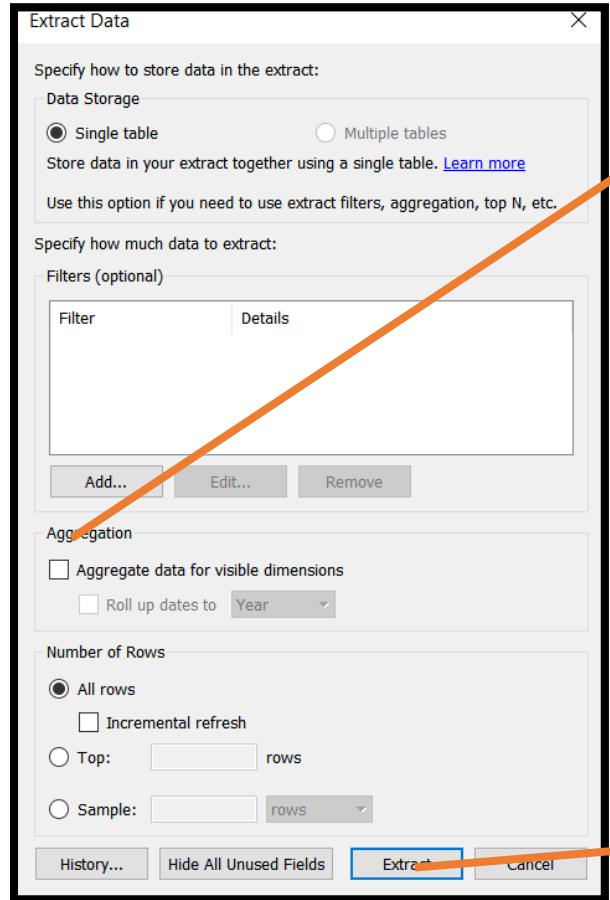
- **Data** is analyzed
- Crawled through to get **relevant information** from your existing **data** source
- In a specific structured pattern or format



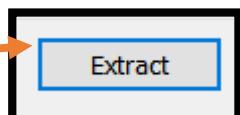
# Data Extraction



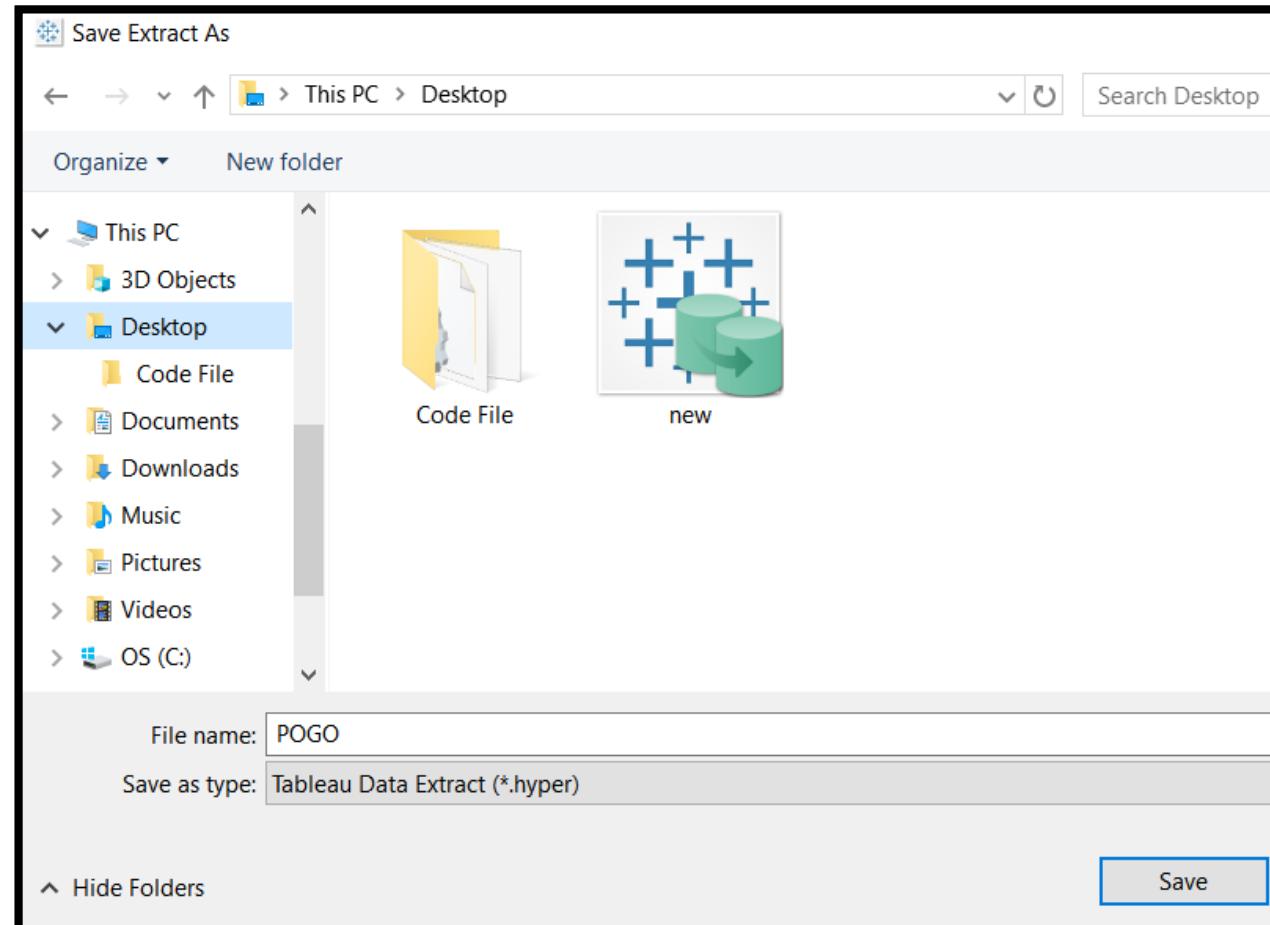
# Data Extraction



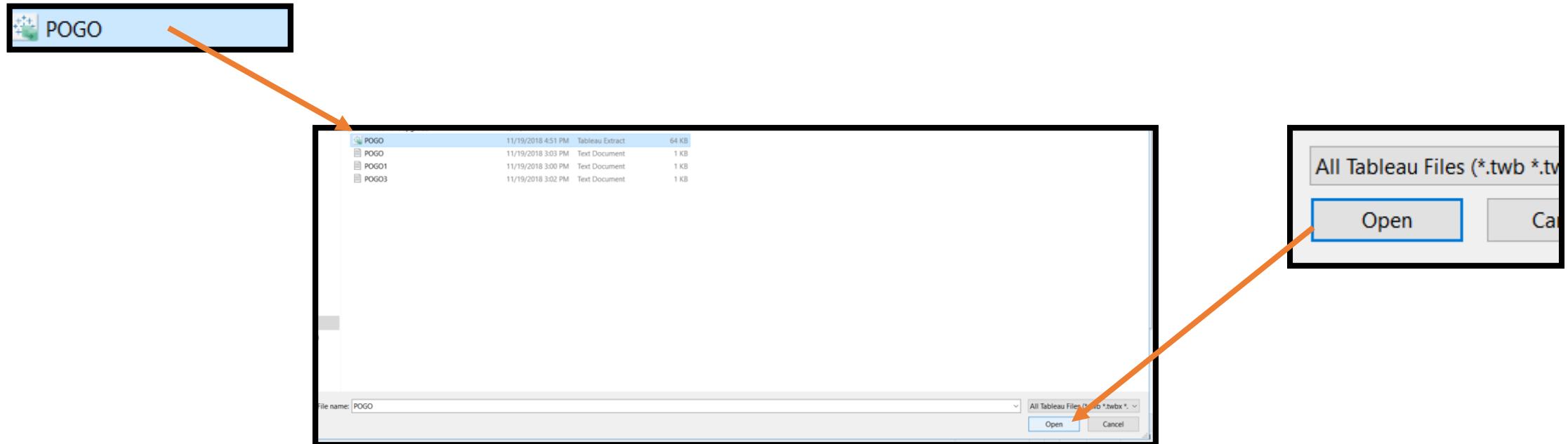
Filters (optional)	
Filter	Details
Month, Day, Year of D...	keeps October 2, 2018, October 20, 2018 a...
TEMP	ranges from 31.20 to 45.00



# Save Extracted Data



# View Extracted Data

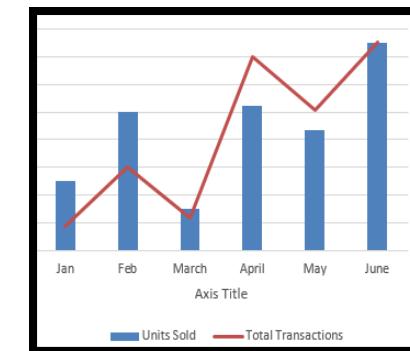
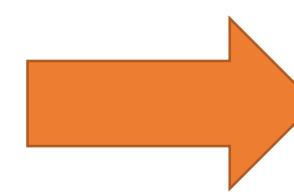
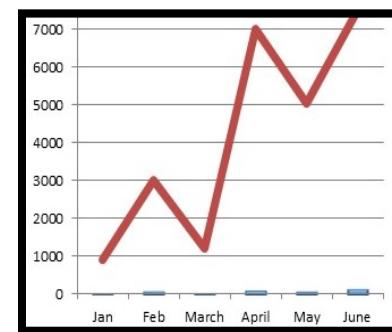
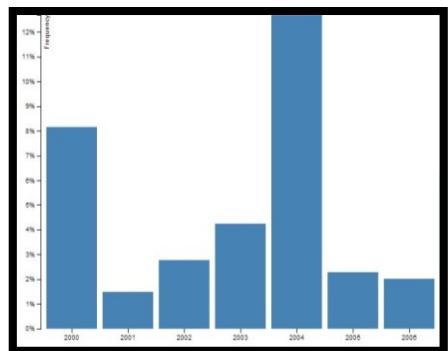


# Extracted Data

The screenshot shows the Tableau Extract interface. In the top left, there's a 'Connections' section with a 'POGO Tableau Extract' connection selected. Below it is a 'Table' section with a single item: 'Extract (Extract.Extract)'. On the right, under the heading 'POGO Extract', there's a large 'Extract' button. At the bottom, there are 'Sort fields' and 'Data source order' buttons, followed by a data grid.

Abc	F2	F3	F4
Time	...	F2	F3
POGO.txt	POGO.txt	POGO.txt	POGO.txt
6:00:23 PM	10/2/2018	31.20000	49.50000
6:00:58 PM	10/20/2018	32.10000	50.30000
6:01:33 PM	10/20/2018	32.70000	48.70000
6:02:08 PM	10/20/2018	33.20000	47.10000
6:02:43 PM	10/20/2018	33.60000	45.80000
1:08:32 PM	11/2/2018	33.50000	45.80000
6:02:08 PM	10/20/2018	33.20000	47.10000
6:02:43 PM	10/20/2018	33.60000	45.80000
1:08:32 PM	11/2/2018	33.50000	45.80000

# Data Joining



# Different types of Joints in Tableau



Left Join



Right Join



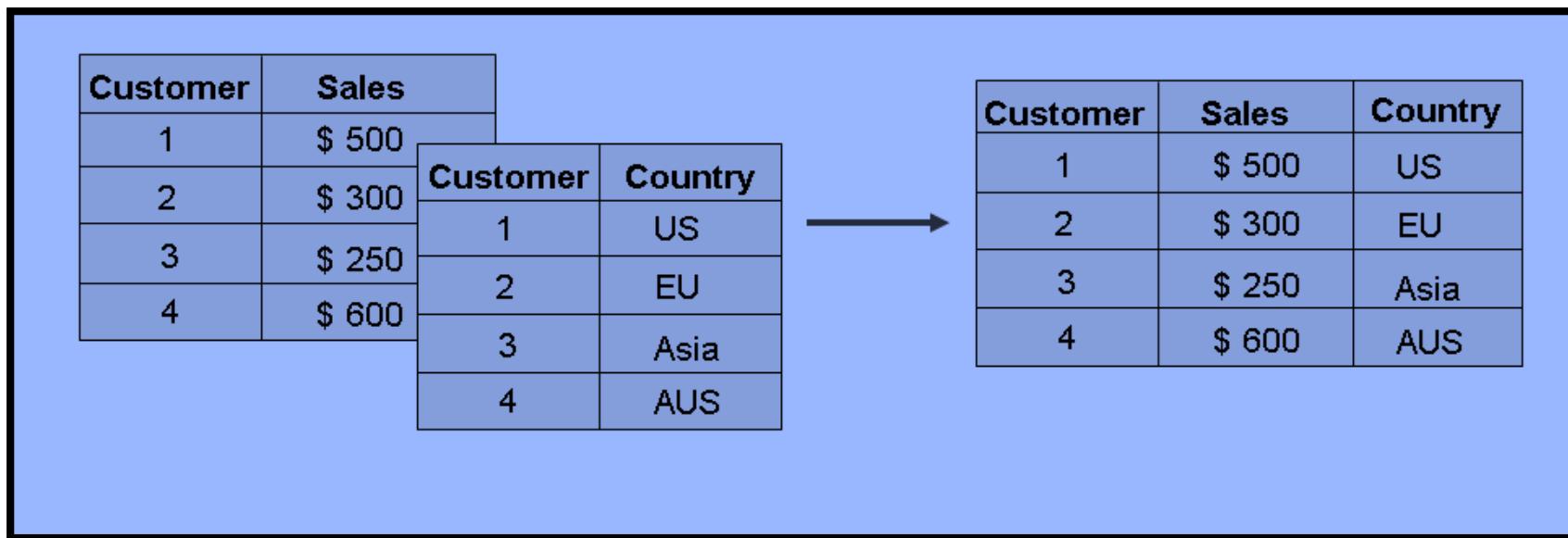
Inner Join



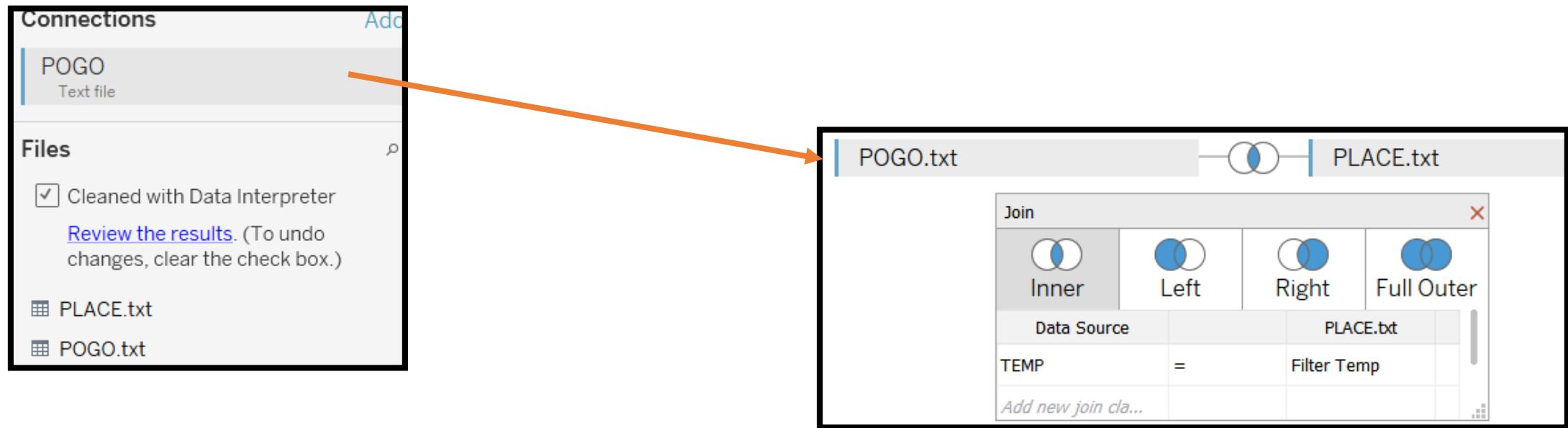
Full outer Join

# Data Joining

Joining data from **Multiple sources** or join data from different tables in a **Single Source**.



# Creating a Join : Drag Drop file

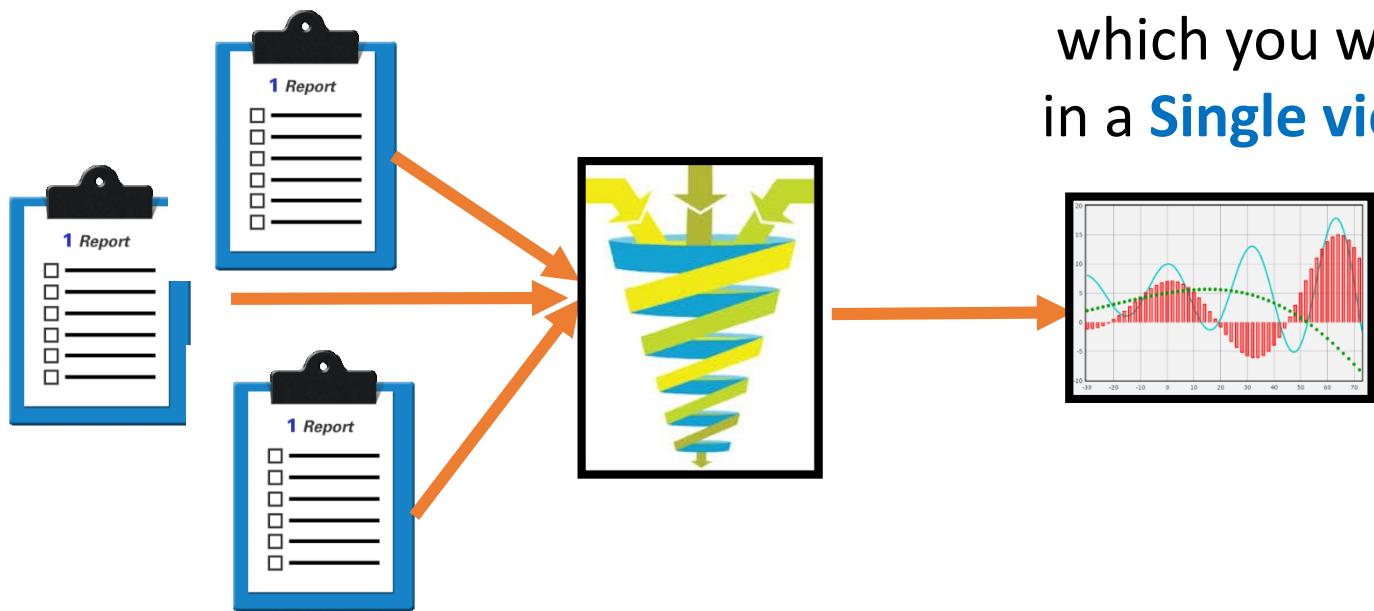


# Mention function to match two files

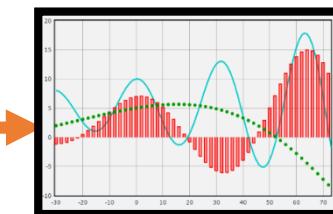
The screenshot shows the Tableau interface with a connection named 'POGO' (Text file) selected. A join is being configured between 'POGO.txt' and 'PLACE.txt'. The join type is set to 'Left' and the key field is 'TEMP'. The resulting data preview shows four rows of data from both files.

#	Abc	白	#	#
PLACE.txt	POGO.txt	POGO.txt	POGO.txt	POGO.txt
Filter Temp	Time	DATE	TEMP	HUMIDITY
33.200000	6:02:08 PM	10/20/2018	33.200000	47.10000
33.600000	6:02:43 PM	10/20/2018	33.600000	45.80000
33.200000	6:02:08 PM	10/20/2018	33.200000	47.10000
33.600000	6:02:43 PM	10/20/2018	33.600000	47.10000

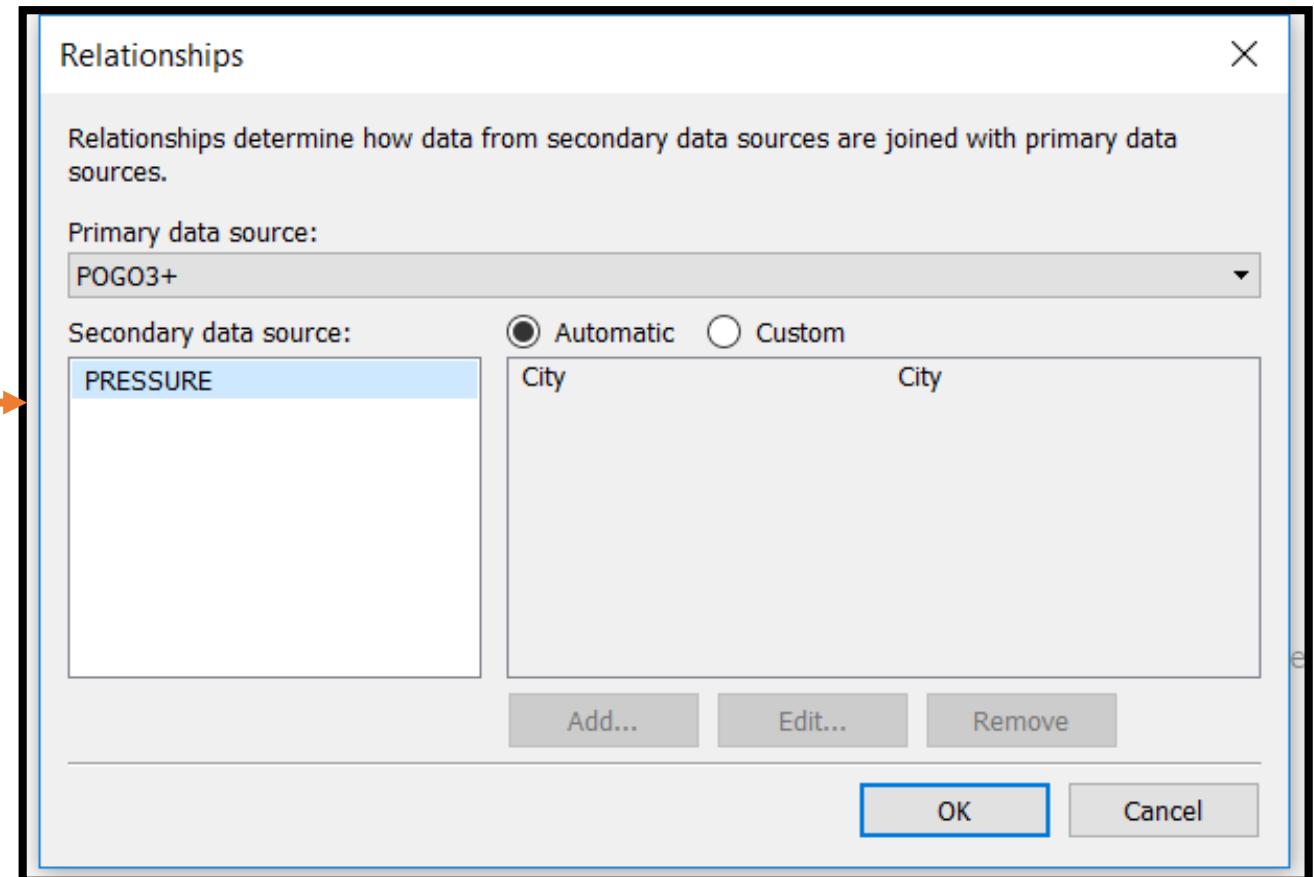
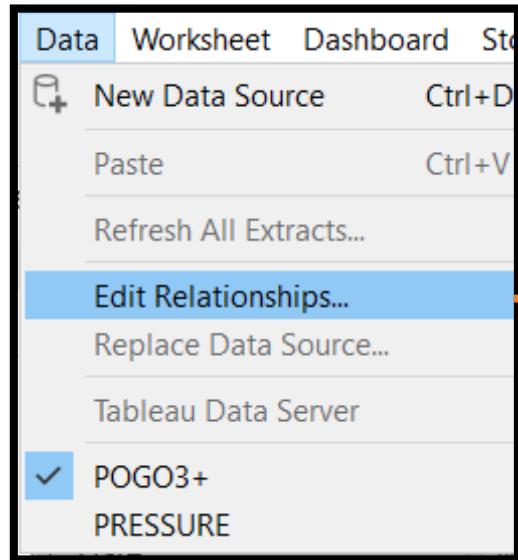
# DATA BLENDING



**Related** data in **Multiple data sources**,  
which you want to analyze together  
in a **Single view**



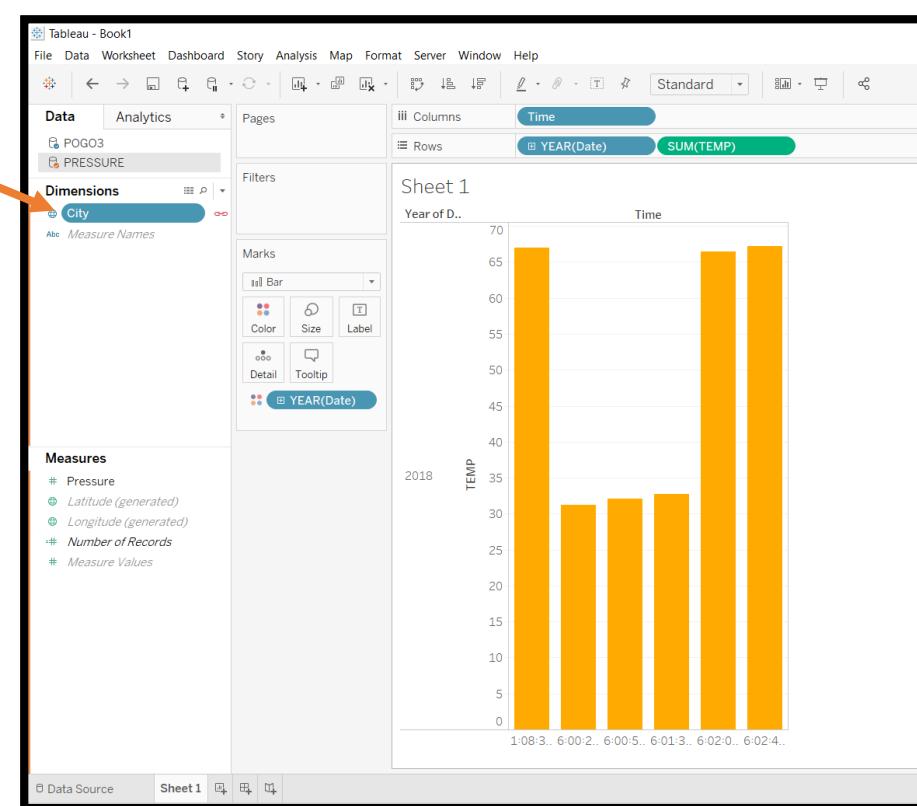
# DATA BLENDING



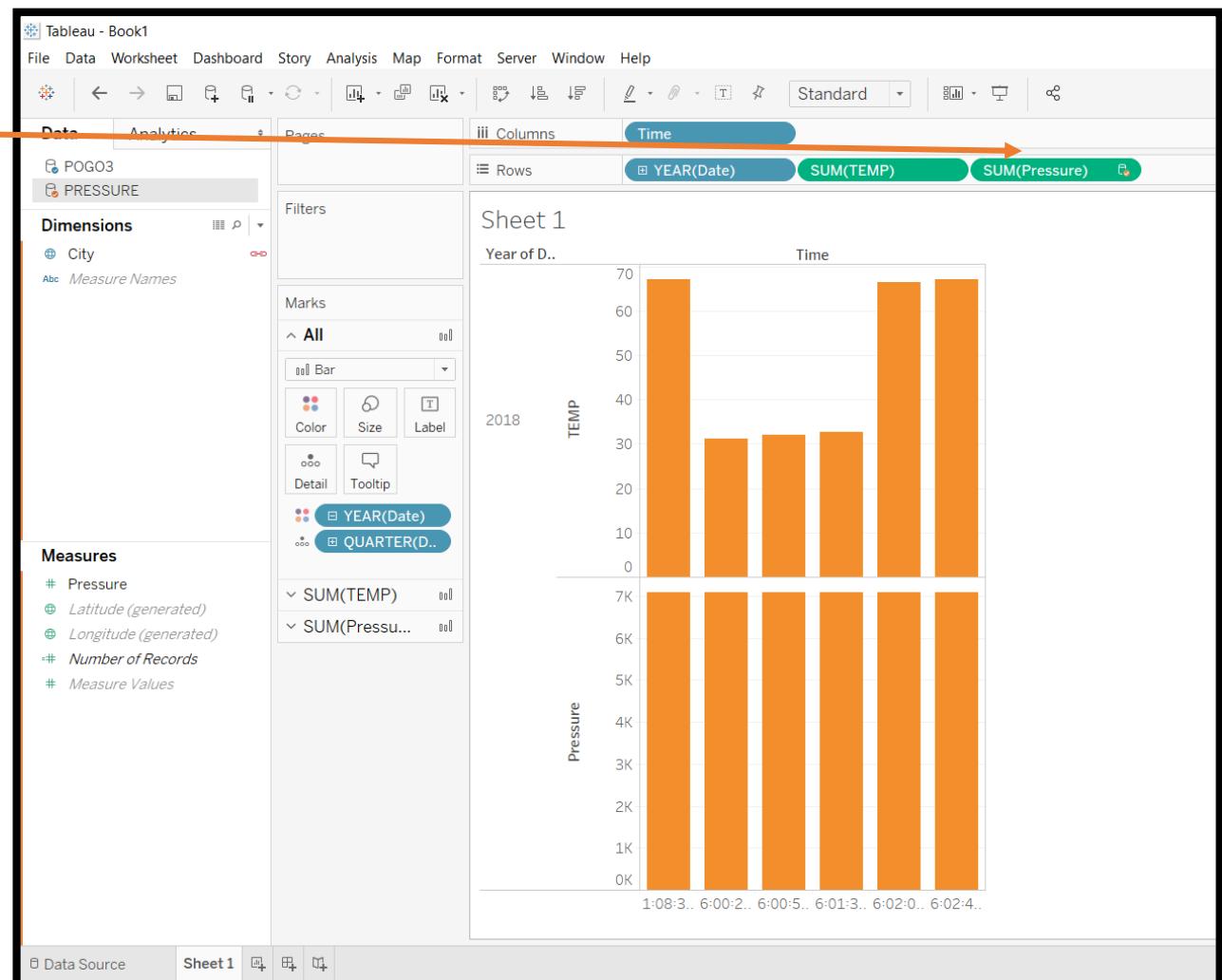
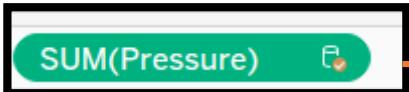
# DATA BLENDING



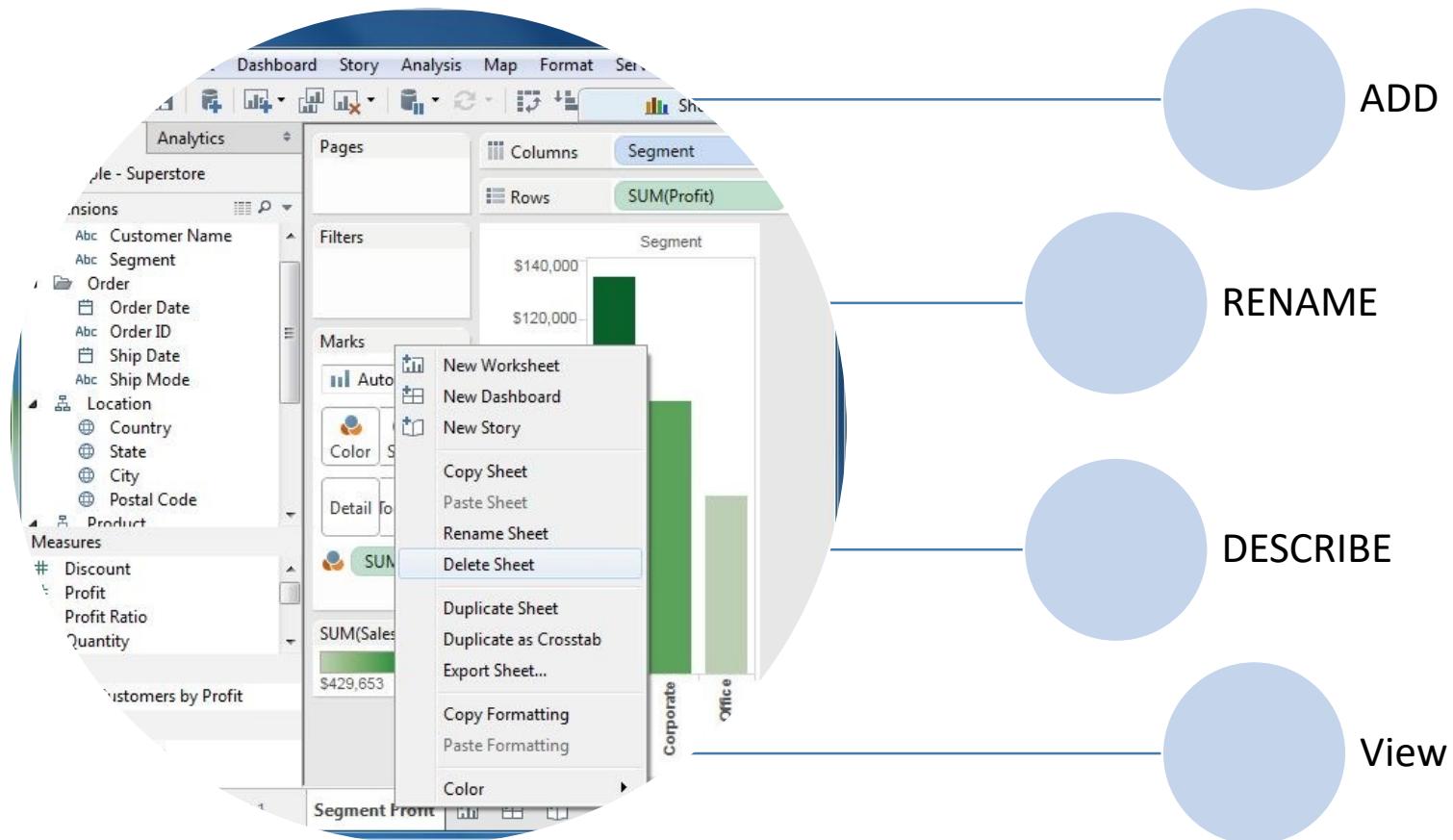
City



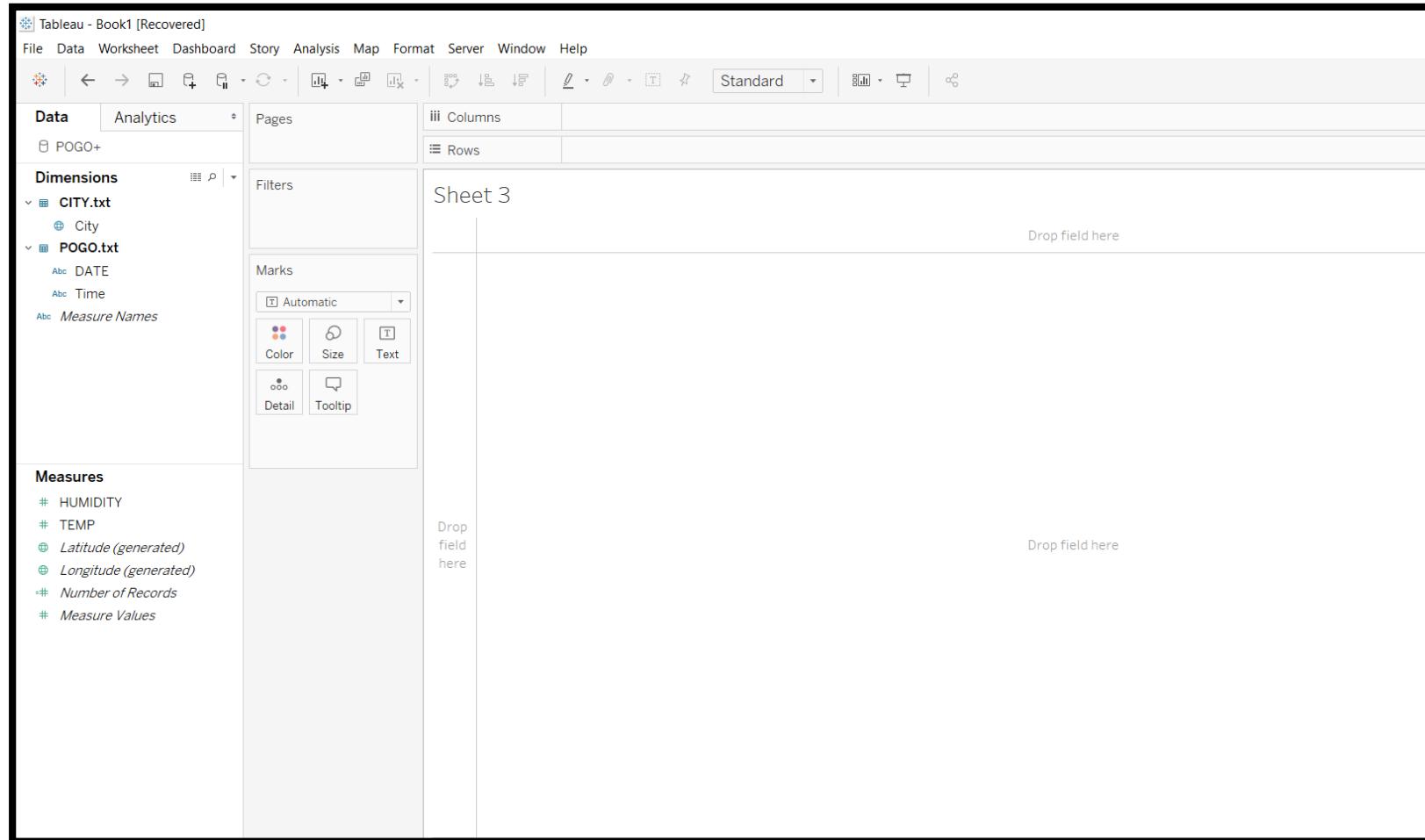
# DATA BLENDING



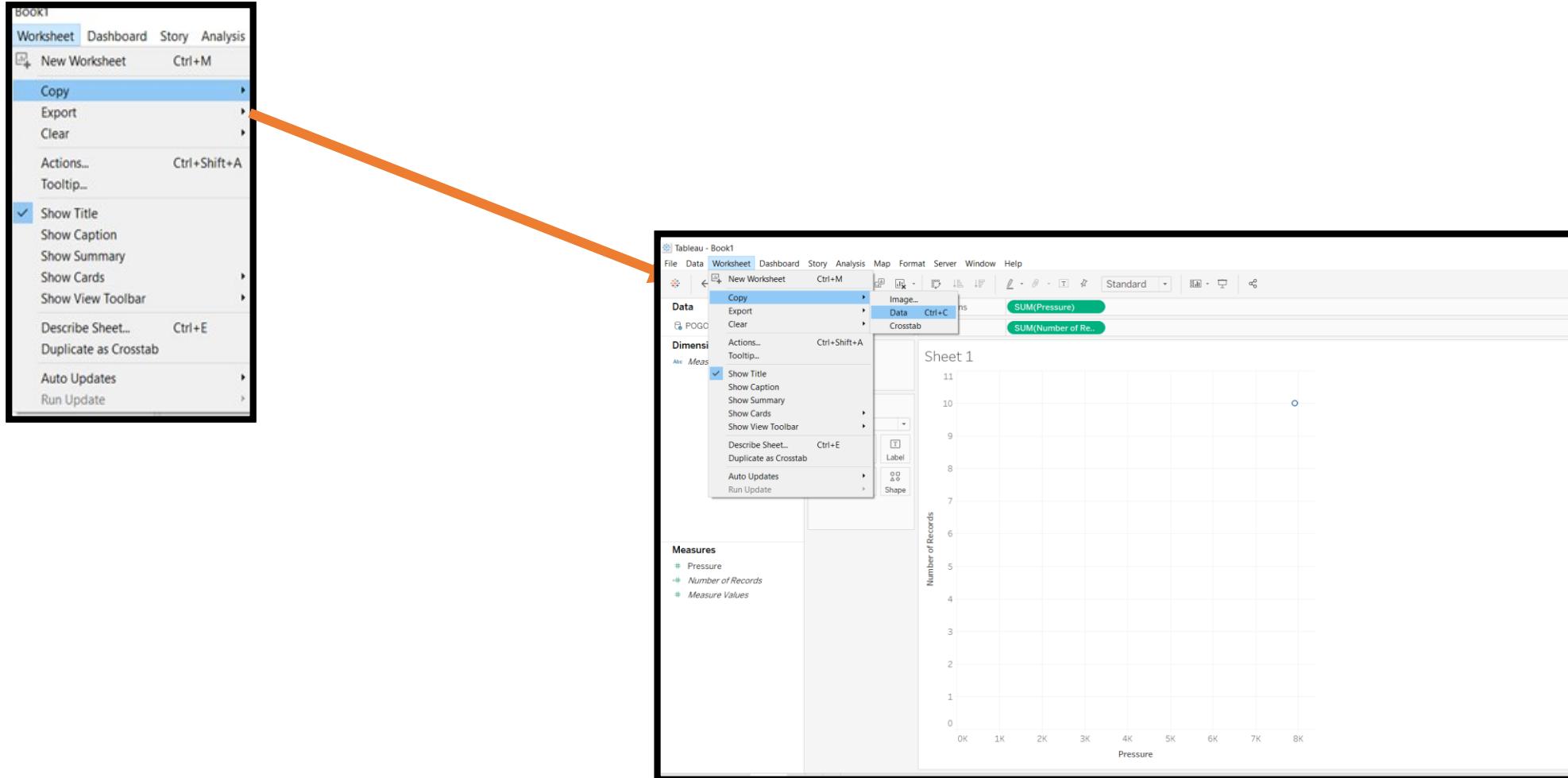
# Tableau Worksheet



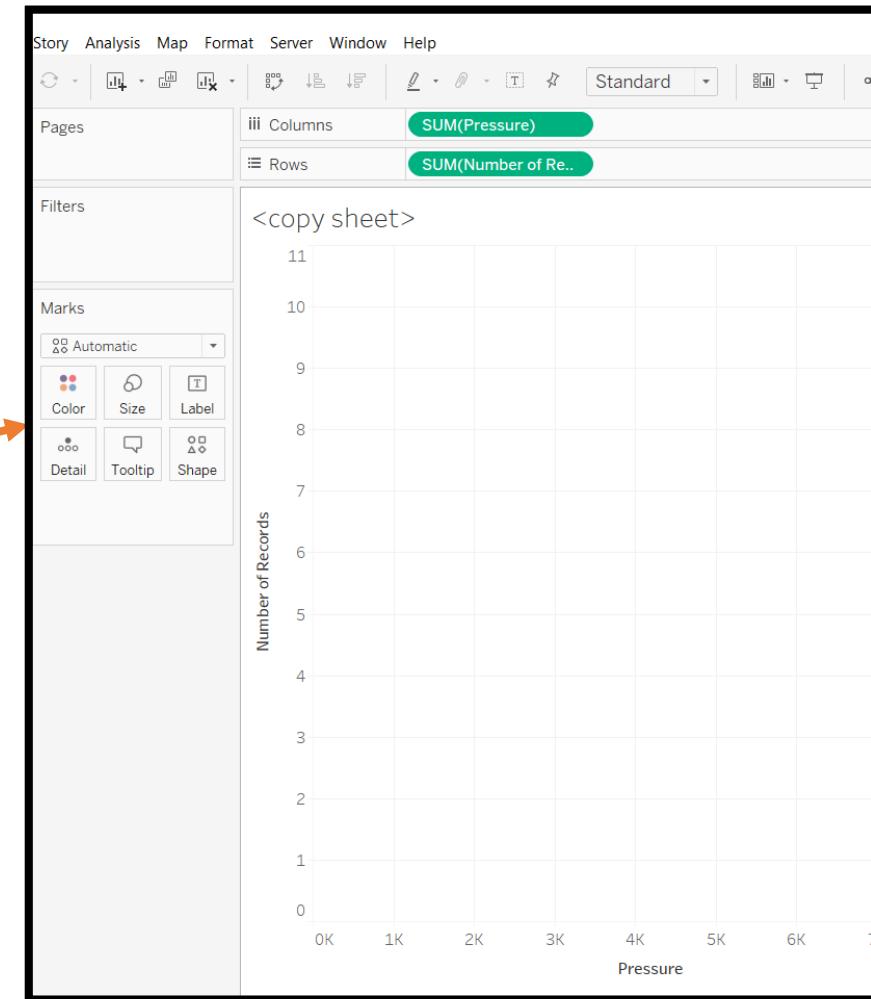
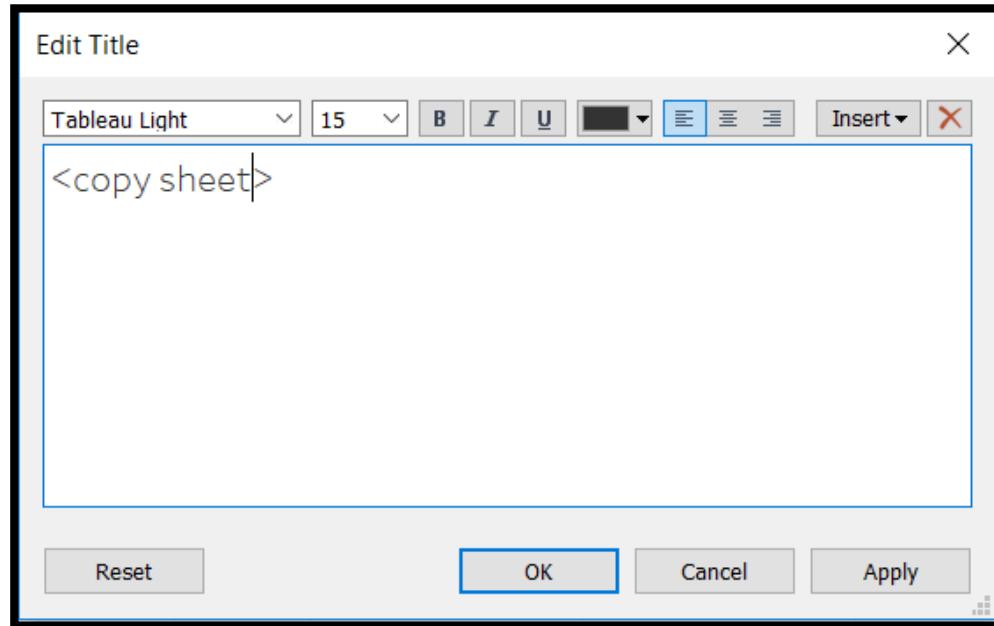
# Tableau Worksheet



# COPY TO NEW WORKSHEET

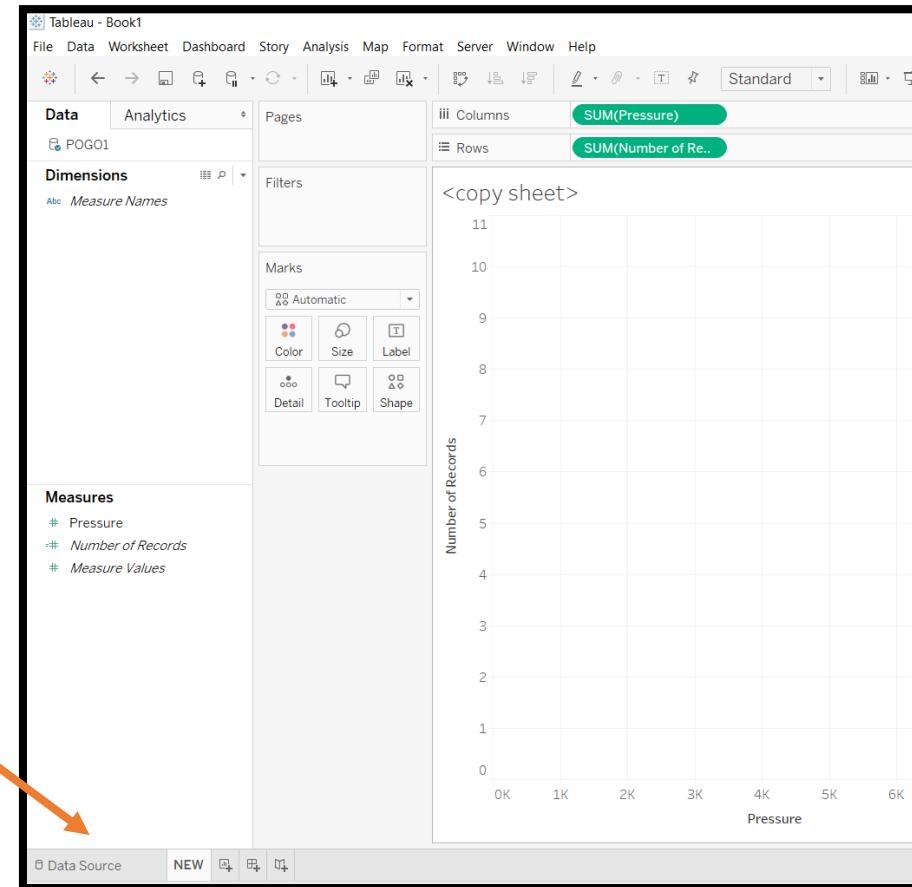


# Give Title to New Sheet

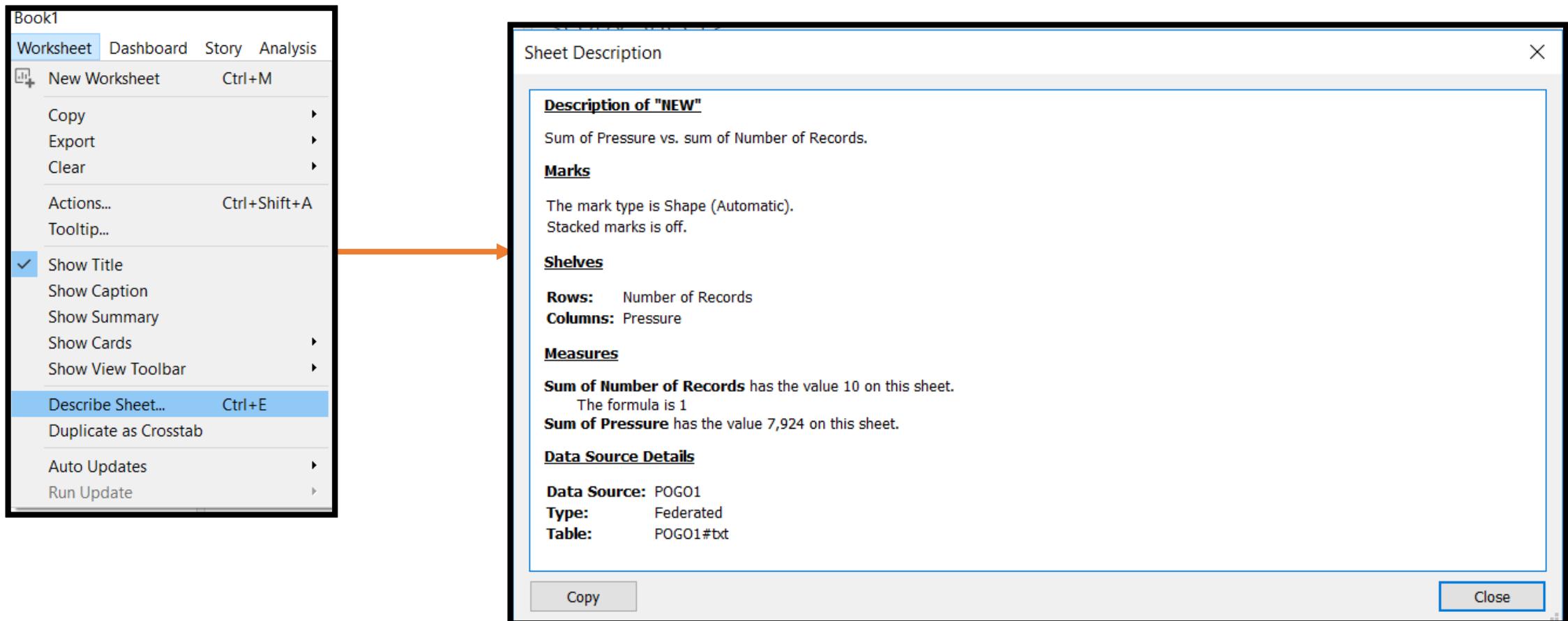


# RENAMING WORKSHEET

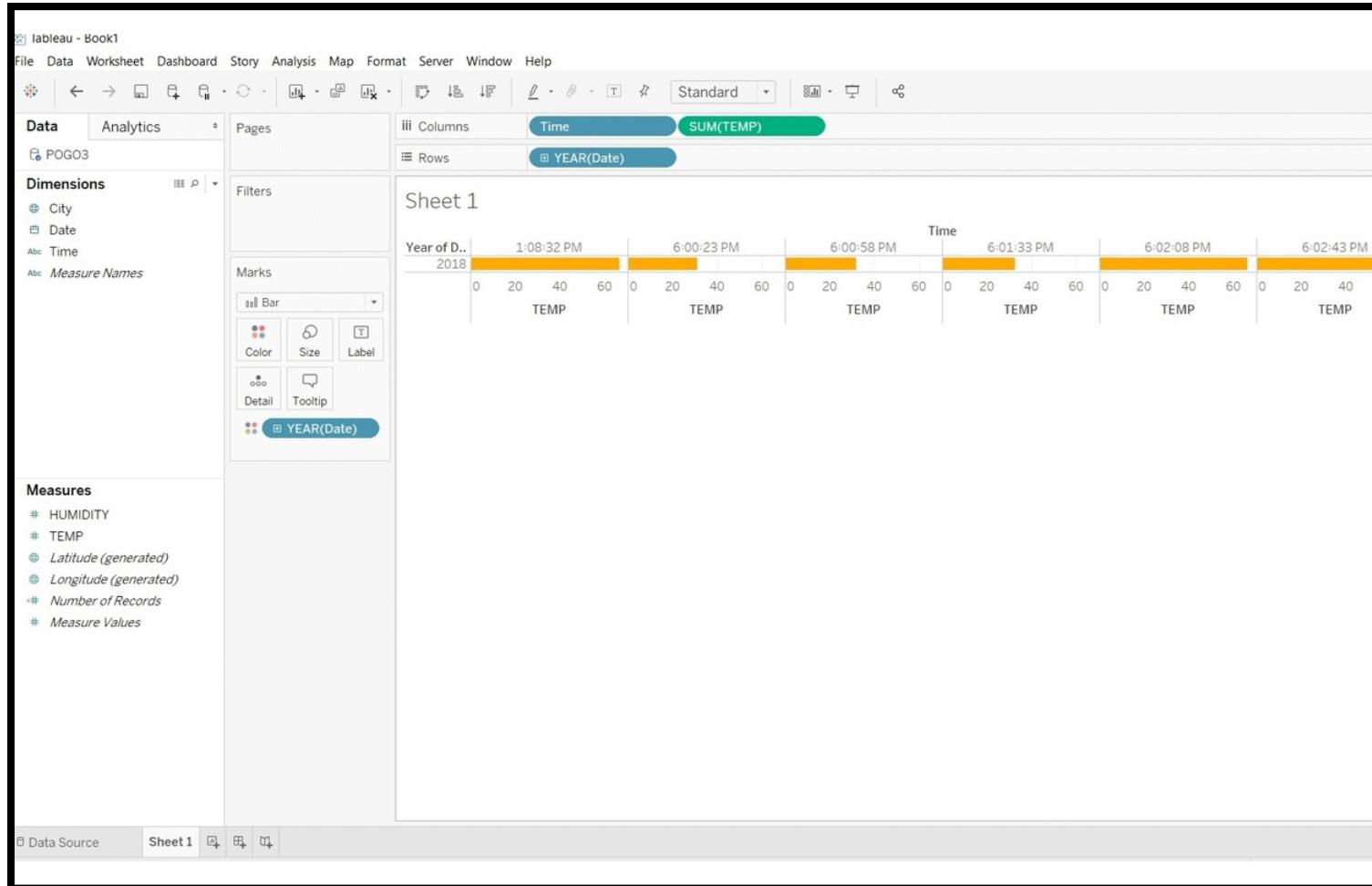
Source	
1 row by 1 column	SUM(Pressure): 7,924



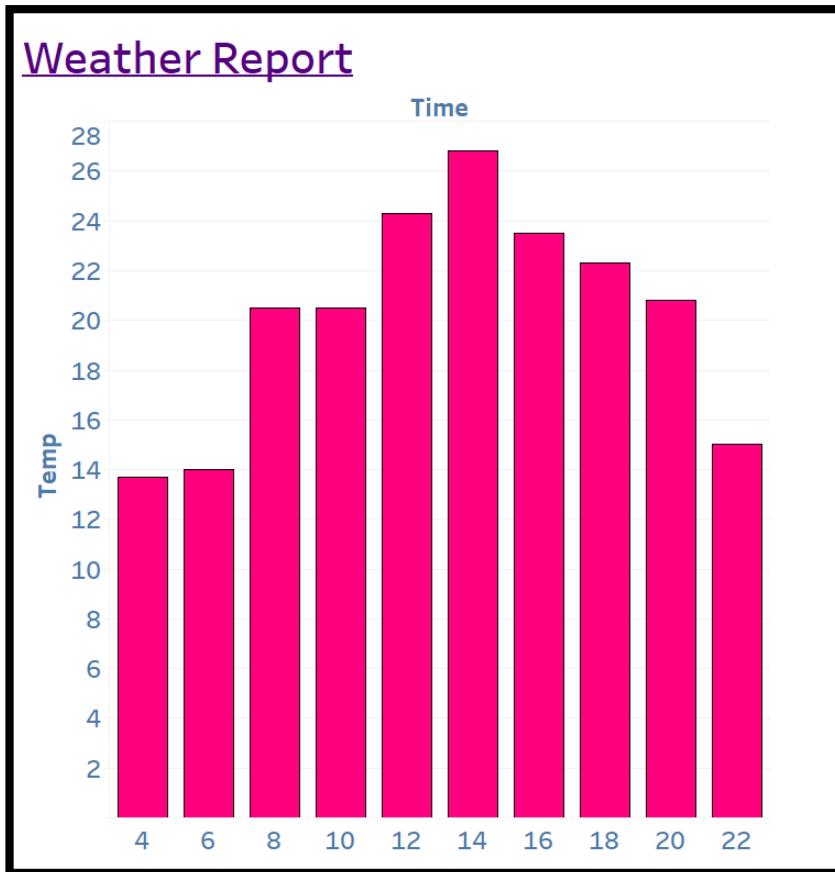
# DESCRIBE WORKSHEET



# REORDERING SHEETS

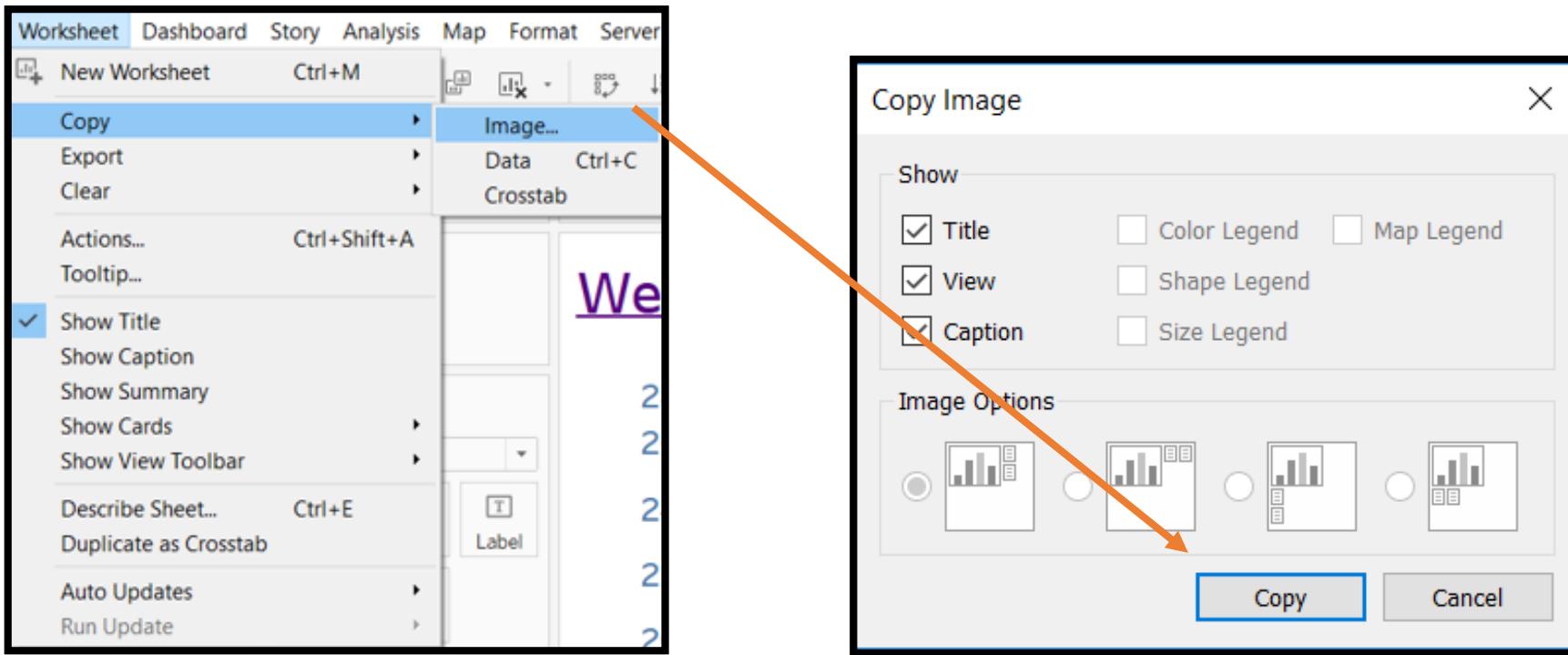


# Export Worksheet Image



Lets Export this beautiful Report on Tableau Worksheet to other document

# Steps to Export in any other document



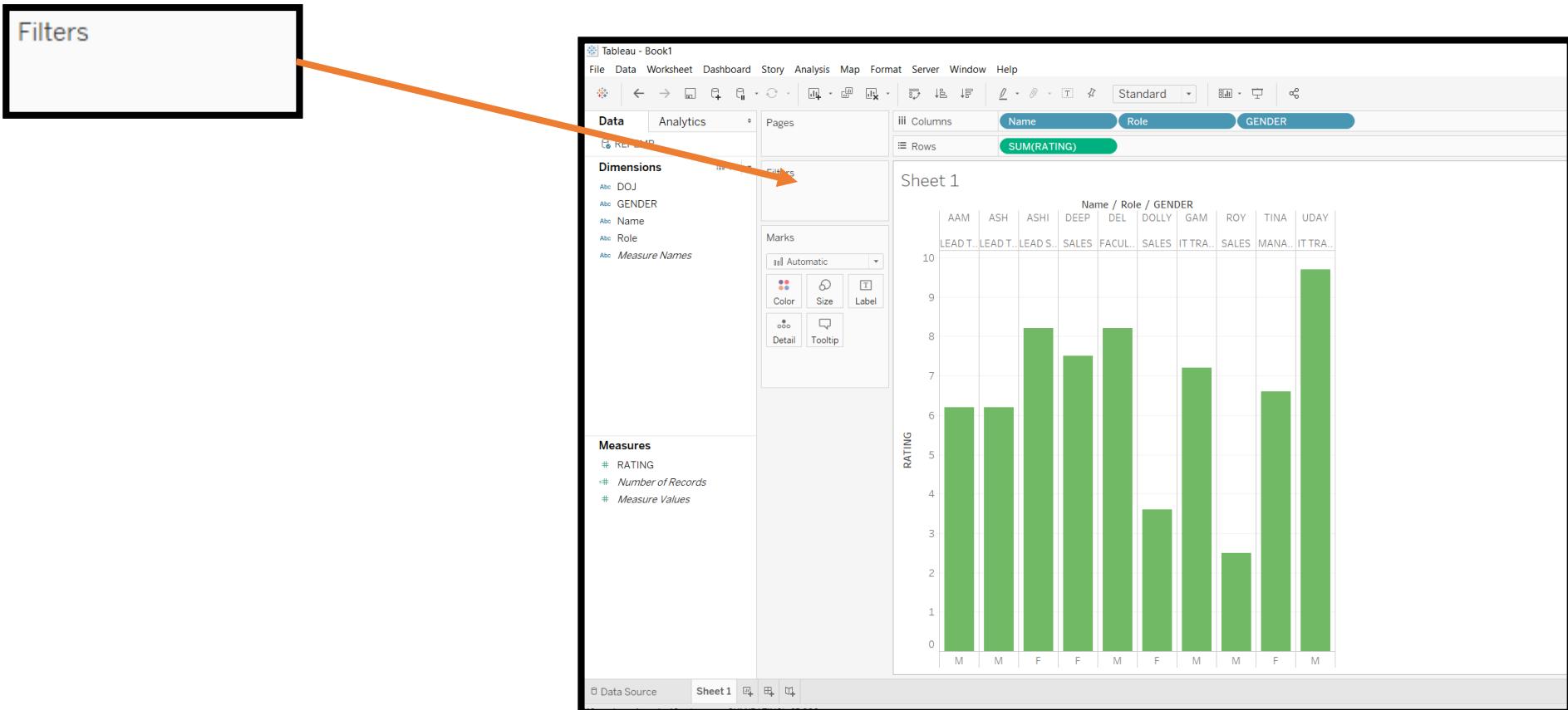
This feature is not available in Tableau Public

# Data Filtering

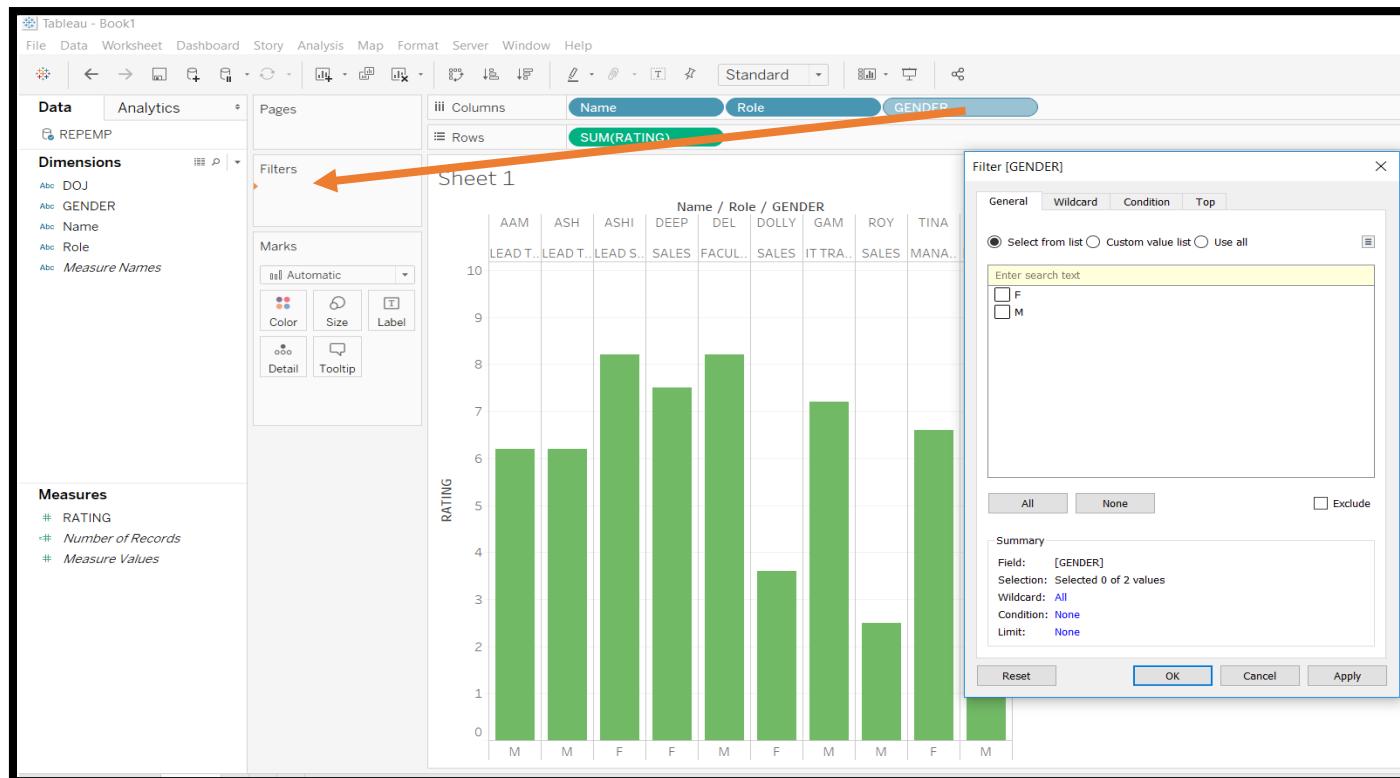


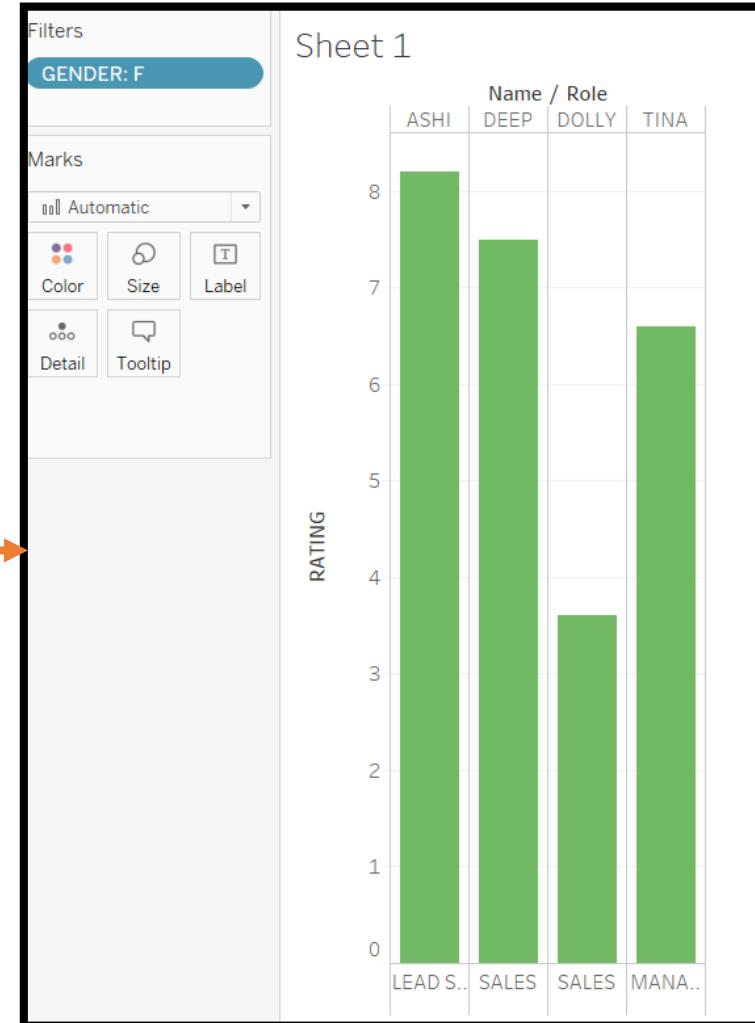
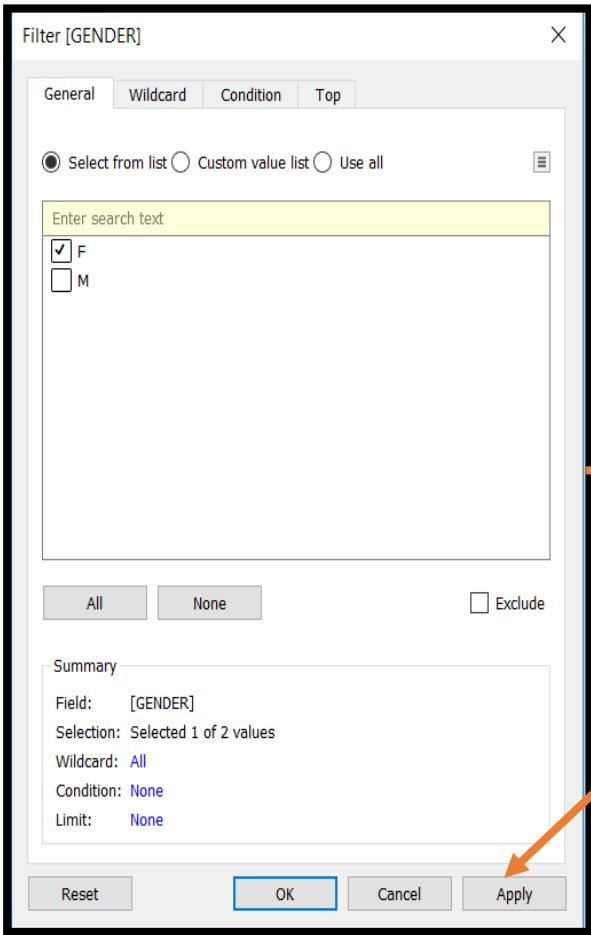
Data Filtering is the process of **removing** certain values or range of values from Data Report

# Navigate for Filters

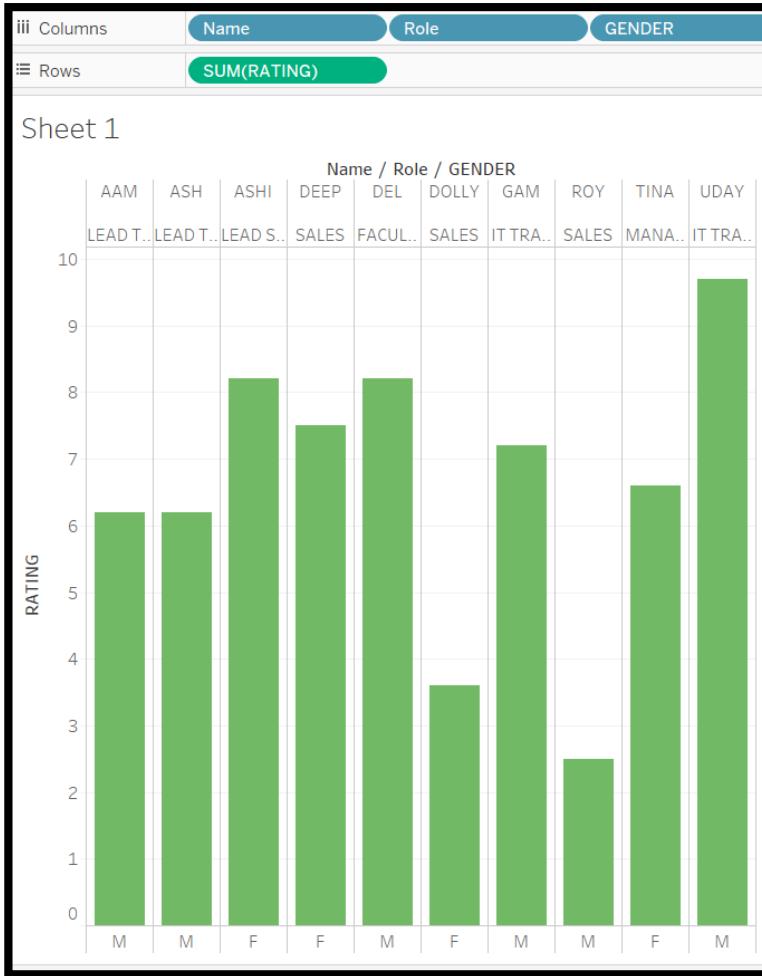


# Select Dimensions or Measures you want to Filter

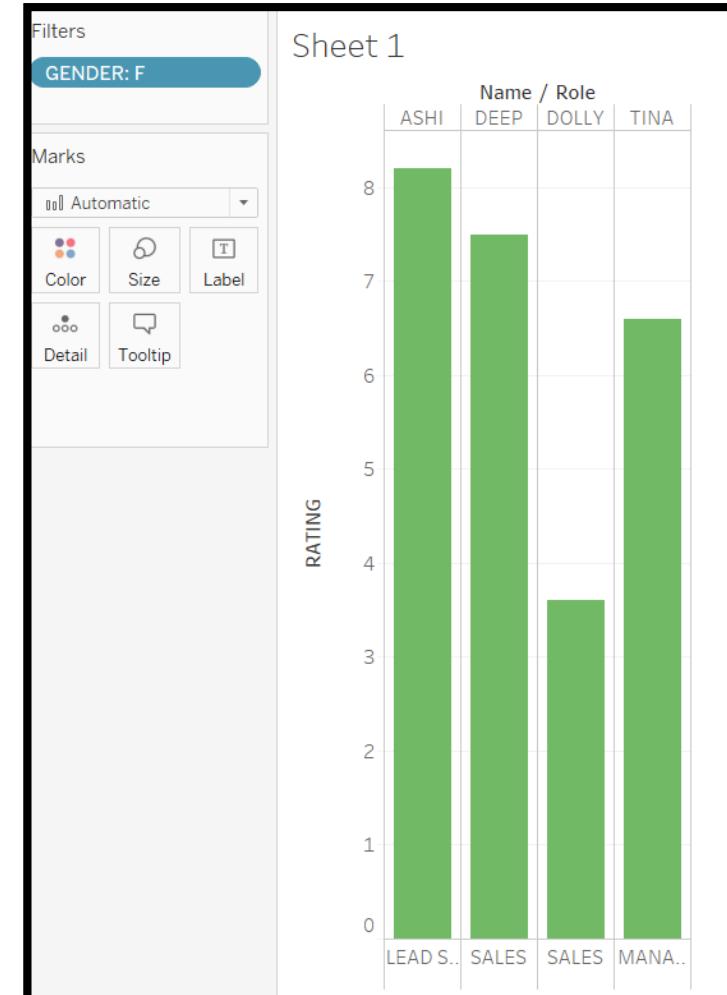




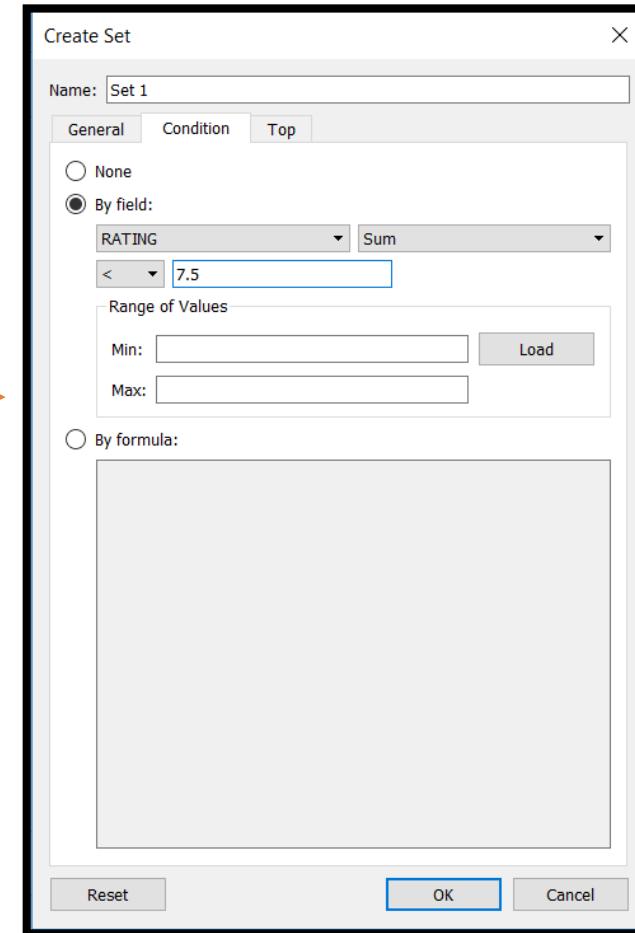
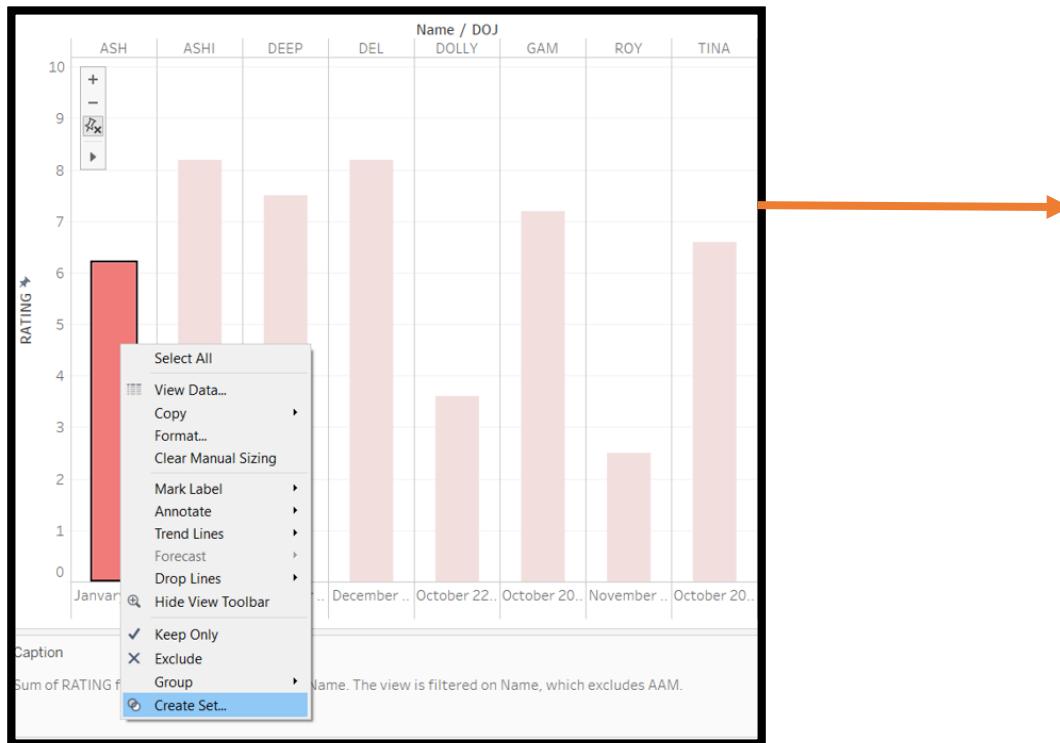
## Before



# After



# Creating Sets



# Creating Sets

The screenshot shows the Tableau interface with a context menu open over a set named "Set1". The menu options include "Add to Sheet", "Show Filter", "Cut", "Copy", "Create Folder...", "Edit Set...", "Duplicate", "Rename", "Hide", "Delete", "Create Calculated Field...", "Create Parameter...", "Default Properties", "Hierarchy", "Show members...", and "Describe...". The "Describe..." option is highlighted with a blue selection bar. An orange arrow points from this menu to a separate window titled "Describe Field" which displays the details of "Set1".

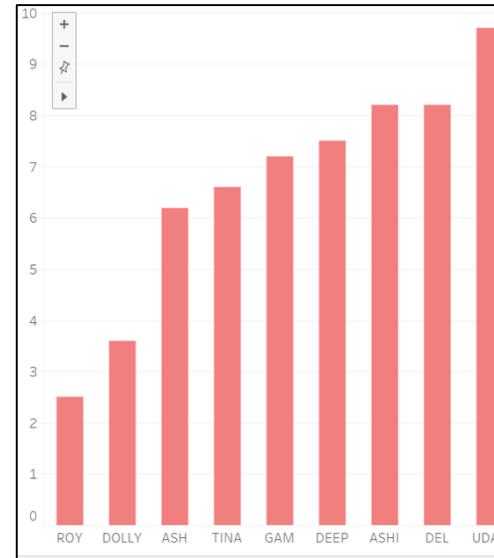
**Set1**

Type: Computed set  
Fields: Name  
Name Style: Unqualified  
Status: Valid

**Domain (6 members)**

- AAM
- ASH
- DOLLY
- GAM
- ROY
- TINA

Load Copy Close



# Calculations : Operators

Arithmetic	Comparison	Logical
+(addition)	= = or = (Equal to)	AND
-(subtraction)	!= or <> (Not equal to)	OR
*(Multiplication)	> (Greater than)	NOT
/(Division)	< (Less than)	
%(modulo)		

# Operator Precedence

Precedence	Operator
1	-(negate)
2	^(power)
3	*, /, %
4	+,-
5	==, >, <, >=, <=, !=
6	NOT
7	AND
8	OR

\* Note : If two operators have the same precedence, they are evaluated from left to right in the formula.

# Functions: Logical Functions

Function	Description	Example
CEILING (number)	Rounds a number to the nearest integer of equal or greater value.	CEILING(2.145) = 3
POWER (number, power)	Raises the number to the specified power.	POWER(5,3) = 125
ROUND (number, [decimals])	Rounds the numbers to a specified number of digits.	ROUND(3.14152,2) = 3.14

# Functions: String Functions

Function	Description	Example
LEN (string)	Returns the length of the string.	LEN("Tableau") = 7
LTRIM (string)	Returns the string with any leading spaces removed.	LTRIM(" Tableau ") = "Tableau"
REPLACE (string, substring, replacement)	Searches the string for substring and replaces it with a replacement. If the substring is not found, the string is not changed.	REPLACE("GreenBlueGree n", "Blue", "Red") = "GreenRedGreen"
UPPER (string)	Returns string, with all characters uppercase.	UPPER("Tableau") = "TABLEAU"

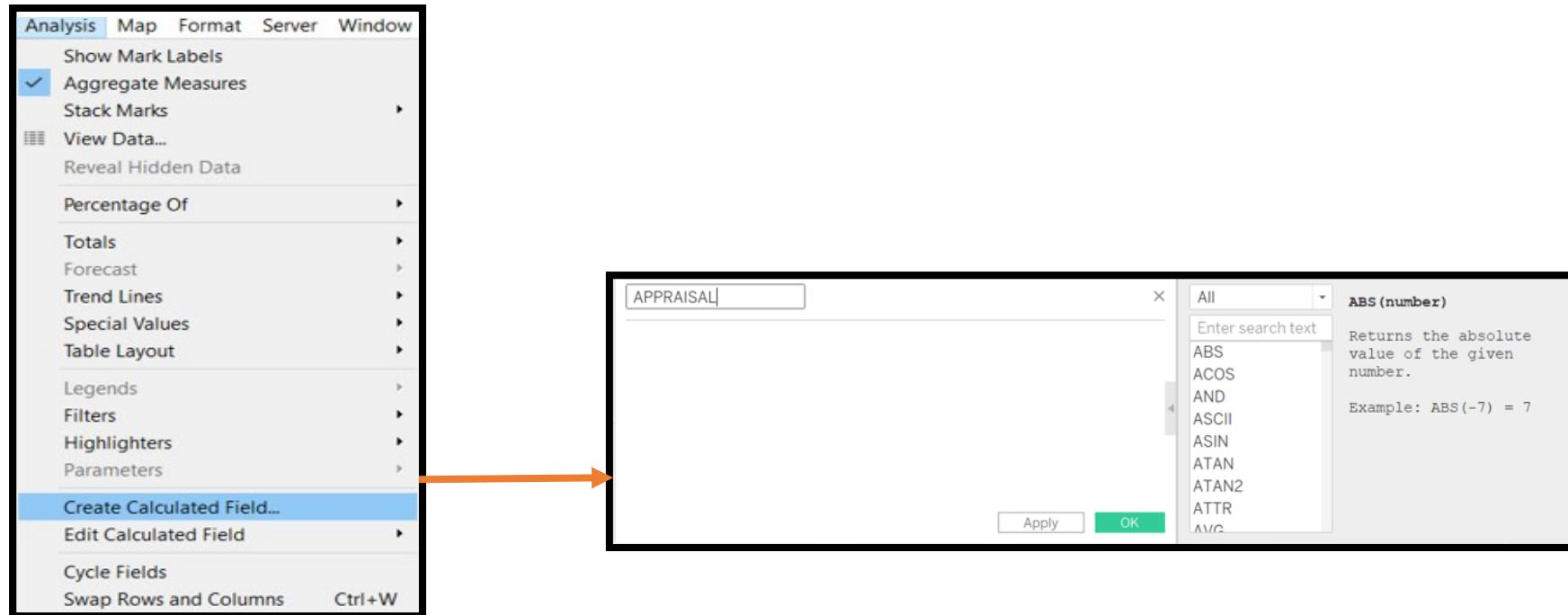
# Functions: Date Functions

Function	Description	Example
DATEADD (date_part, increment, date)	Returns an increment added to the date. The type of increment is specified in date_part.	DATEADD ('month', 3, #2004-04-15#) = 2004-0715 12:00:00 AM
DATENAME (date_part, date, [start_of_week])	Returns date_part of date as a string. The start_of_week parameter is optional.	DATENAME('month', #200404-15#) = "April"
DAY (date)	Returns the day of the given date as an integer.	DAY(#2004-04-12#) = 12
NOW( )	Returns the current date and time.	NOW( ) = 2004-04-15 1:08:21 PM

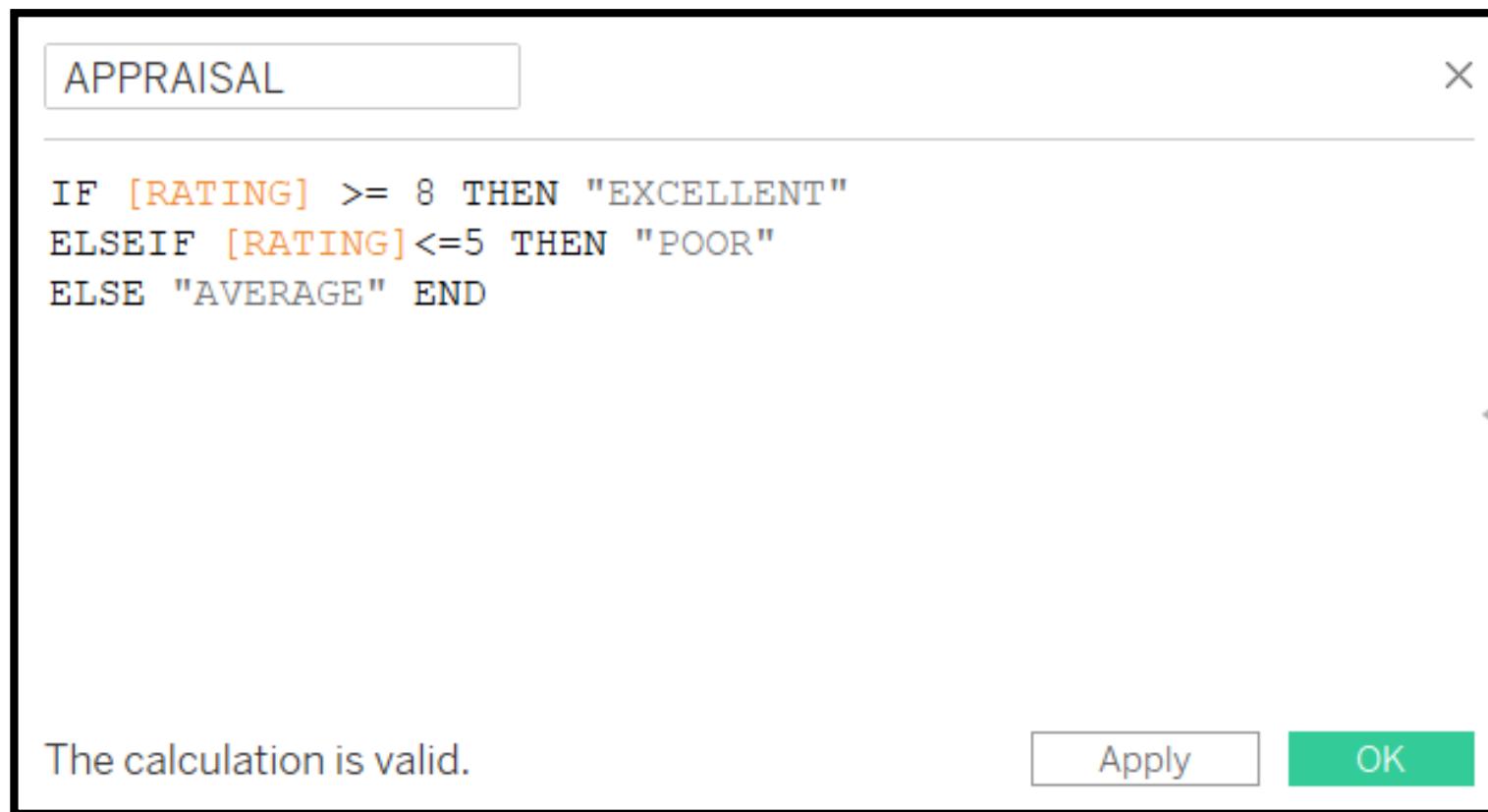
# Functions: Logical Functions

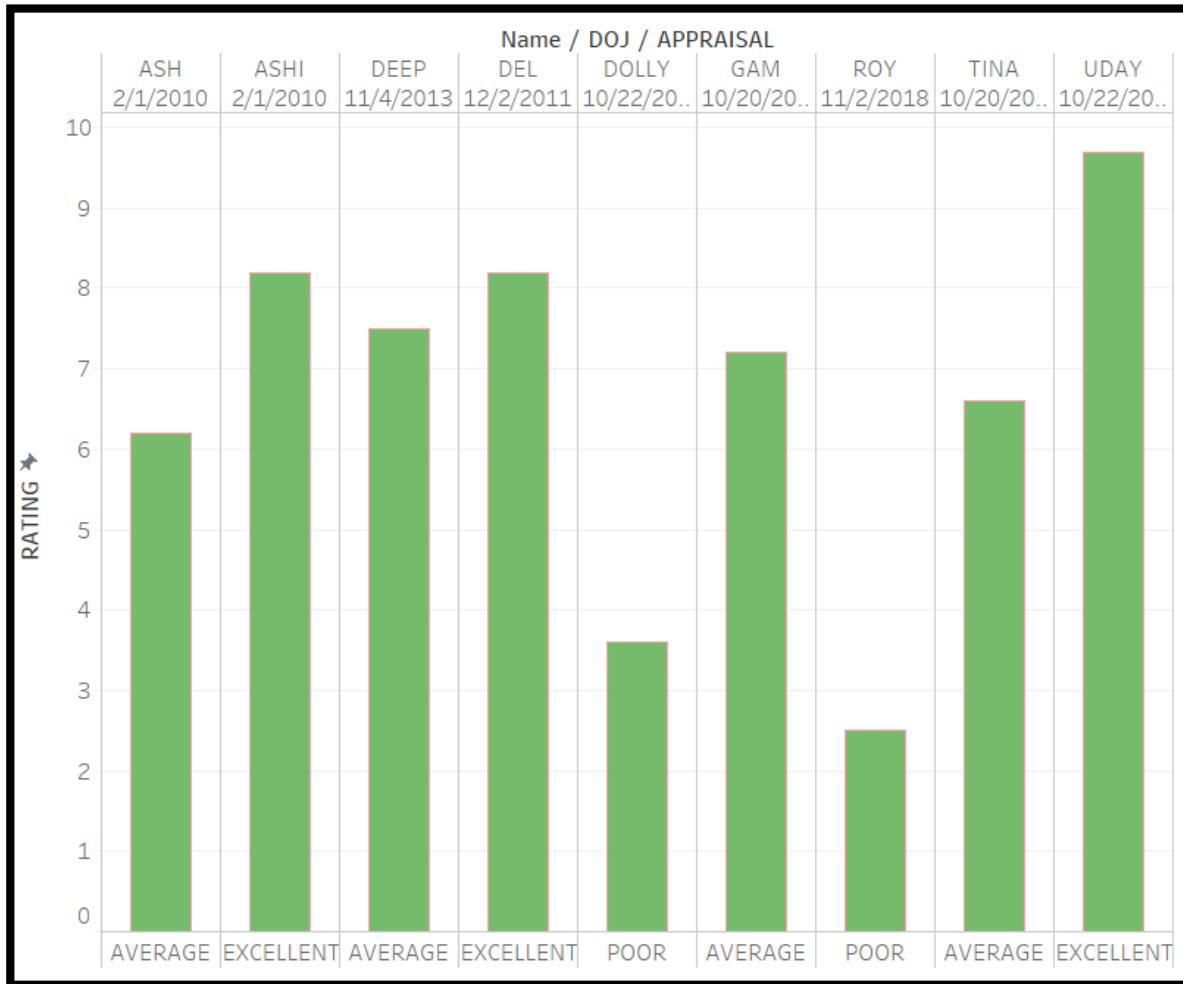
Function	Description	Example
IFNULL (expression1, expression2)	The IFNULL function returns the first expression if the result is not null, and returns the second expression if it is null.	IFNULL([Sales], 0) = [Sales]
ISDATE (string)	The ISDATE function returns TRUE if the string argument can be converted to a date, and FALSE if it cannot.	ISDATE("11/05/98") = TRUE ISDATE("14/05/98") = FALSE
MIN(expression)	The MIN function returns the minimum of an expression across all records or the minimum of two expressions for each record.	MIN[5,7,-8,12]=-8

# Creating Calculated Fields



# Creating Calculation Formula





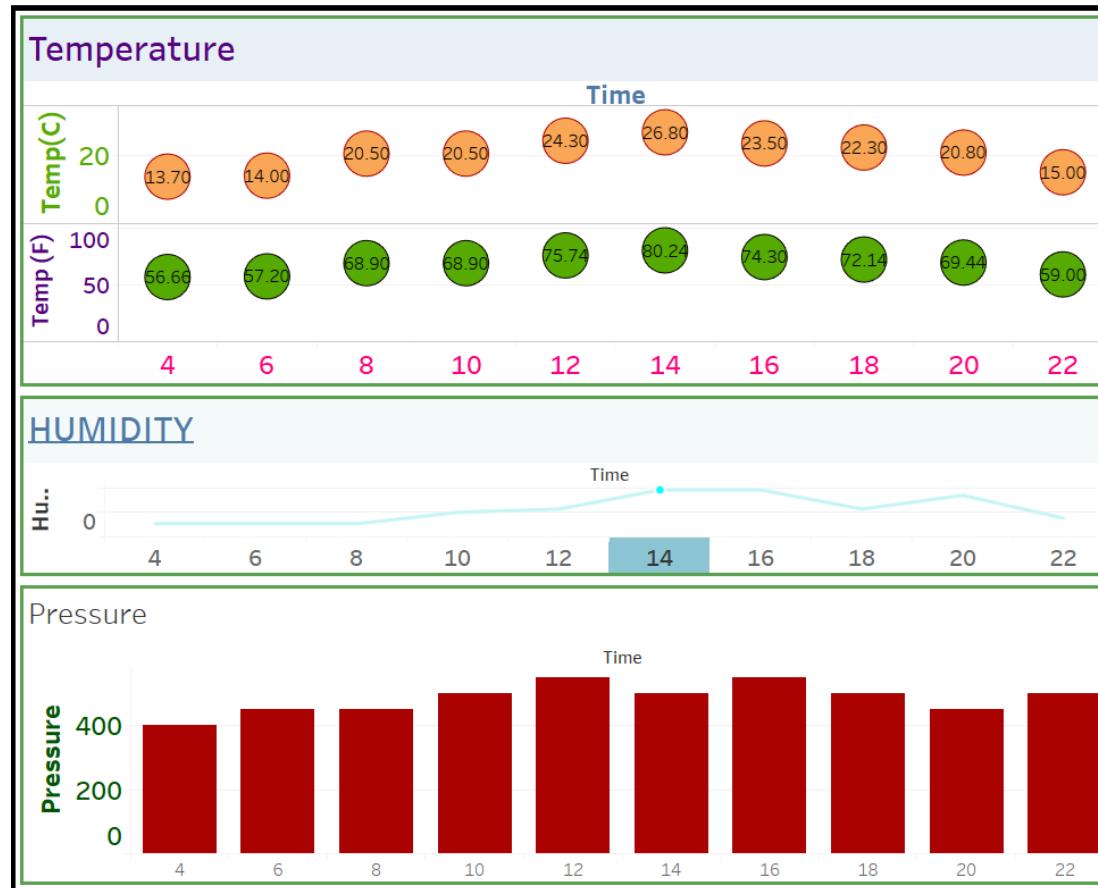
# Tableau Dashboard

# DASHBOARD : Why ?

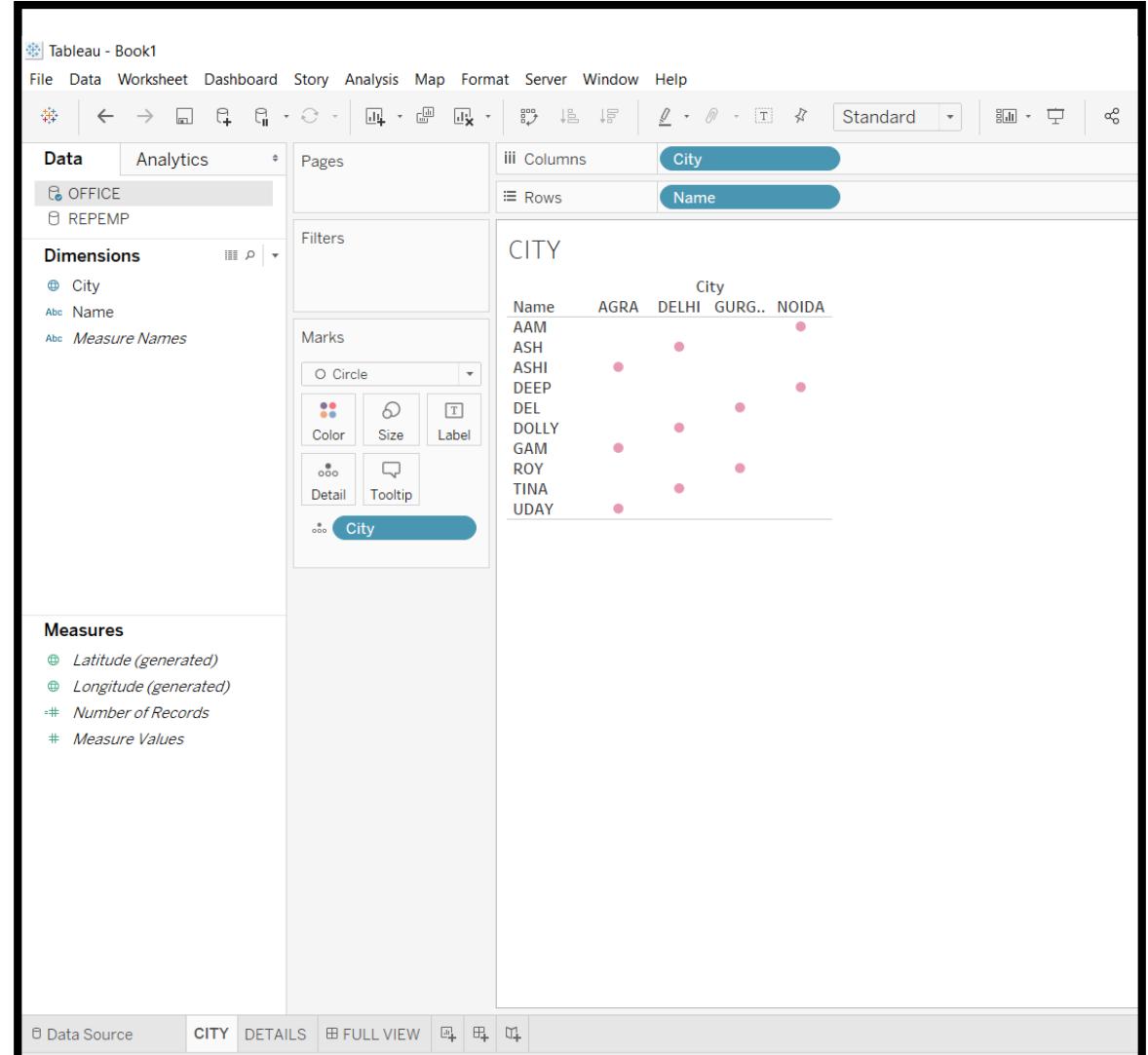


- Better decisions
- Visual representation of your business(real time information)
- To get important metrics of company performance
- Clear view of information

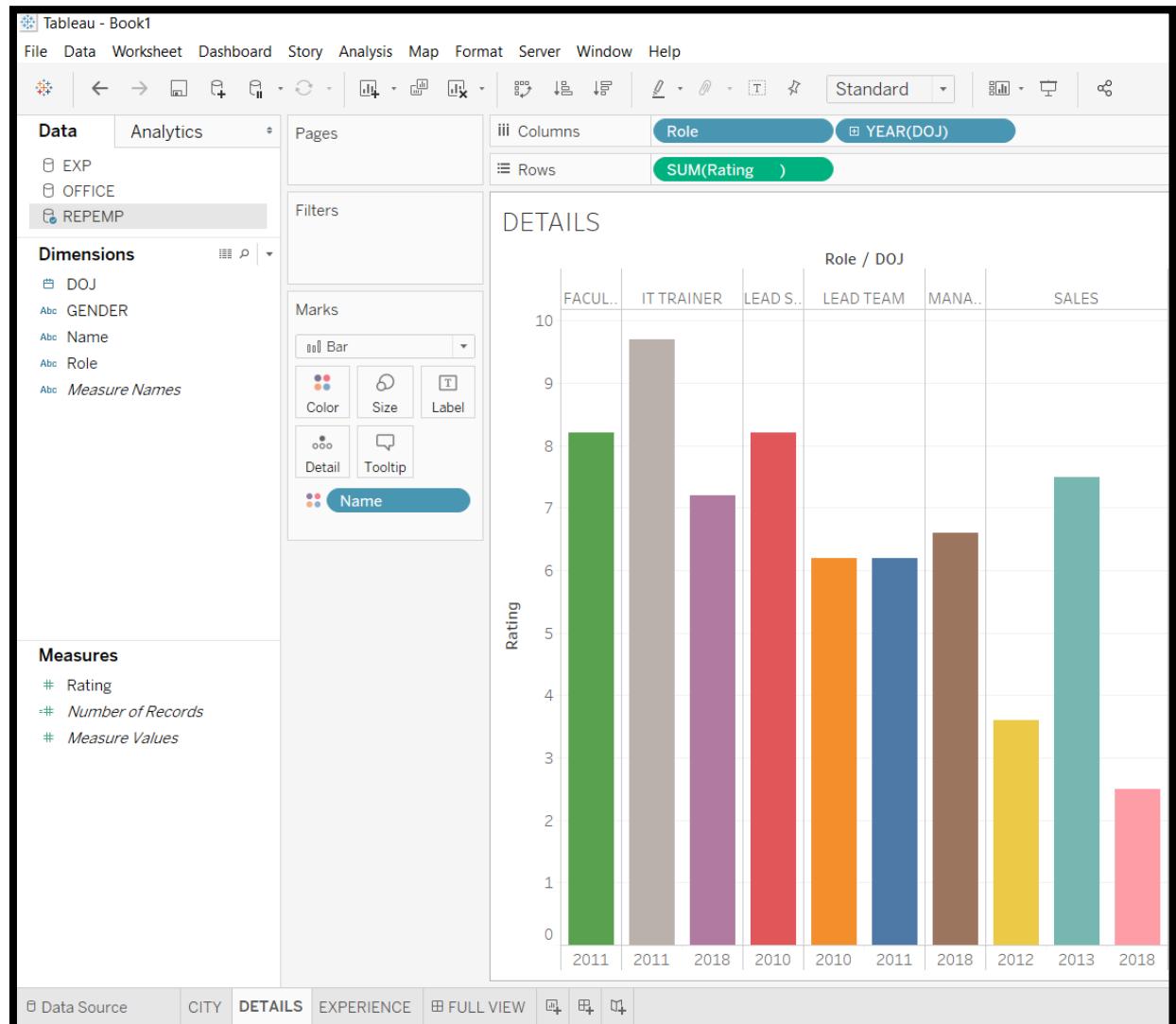
# DASHBOARD VIEW



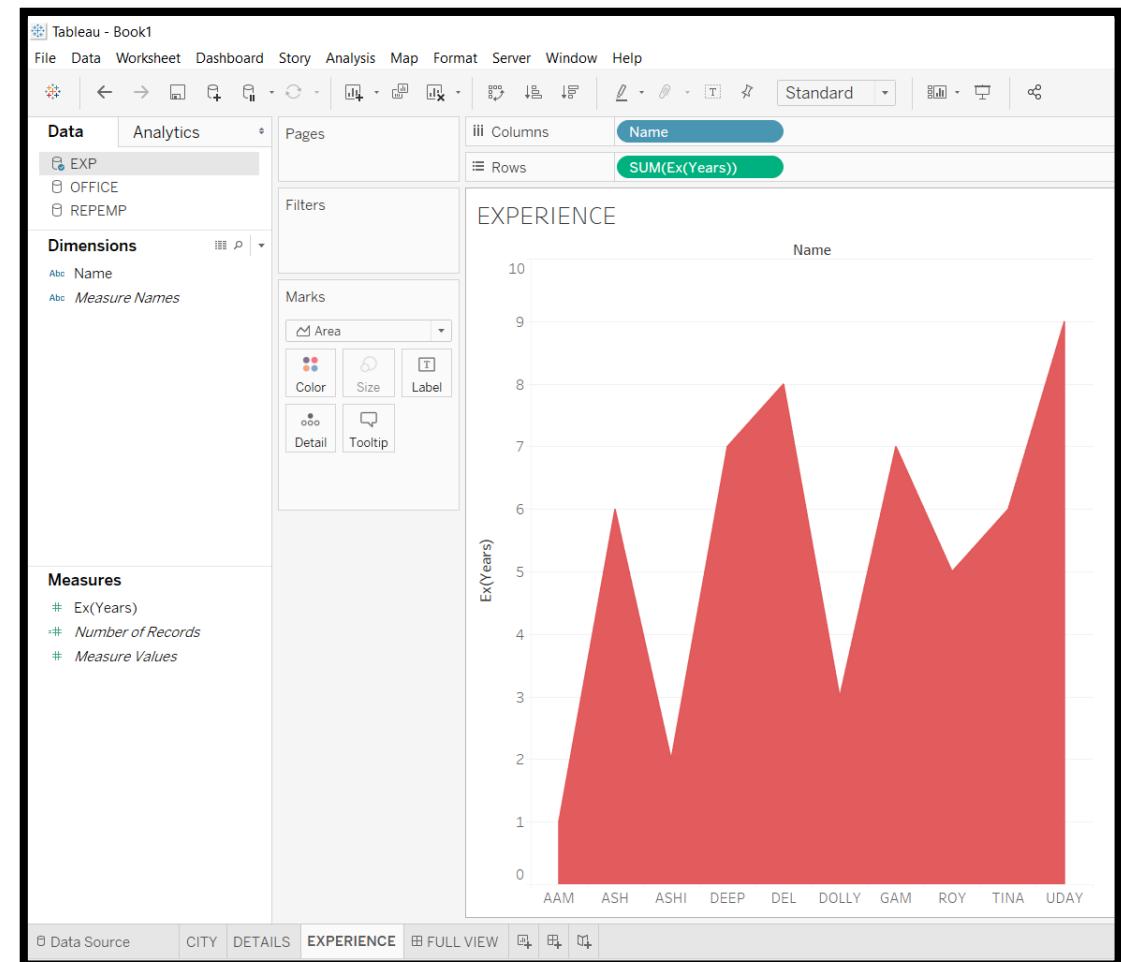
# WORKSHEET: CITY



# WORKSHEET: DETAILS



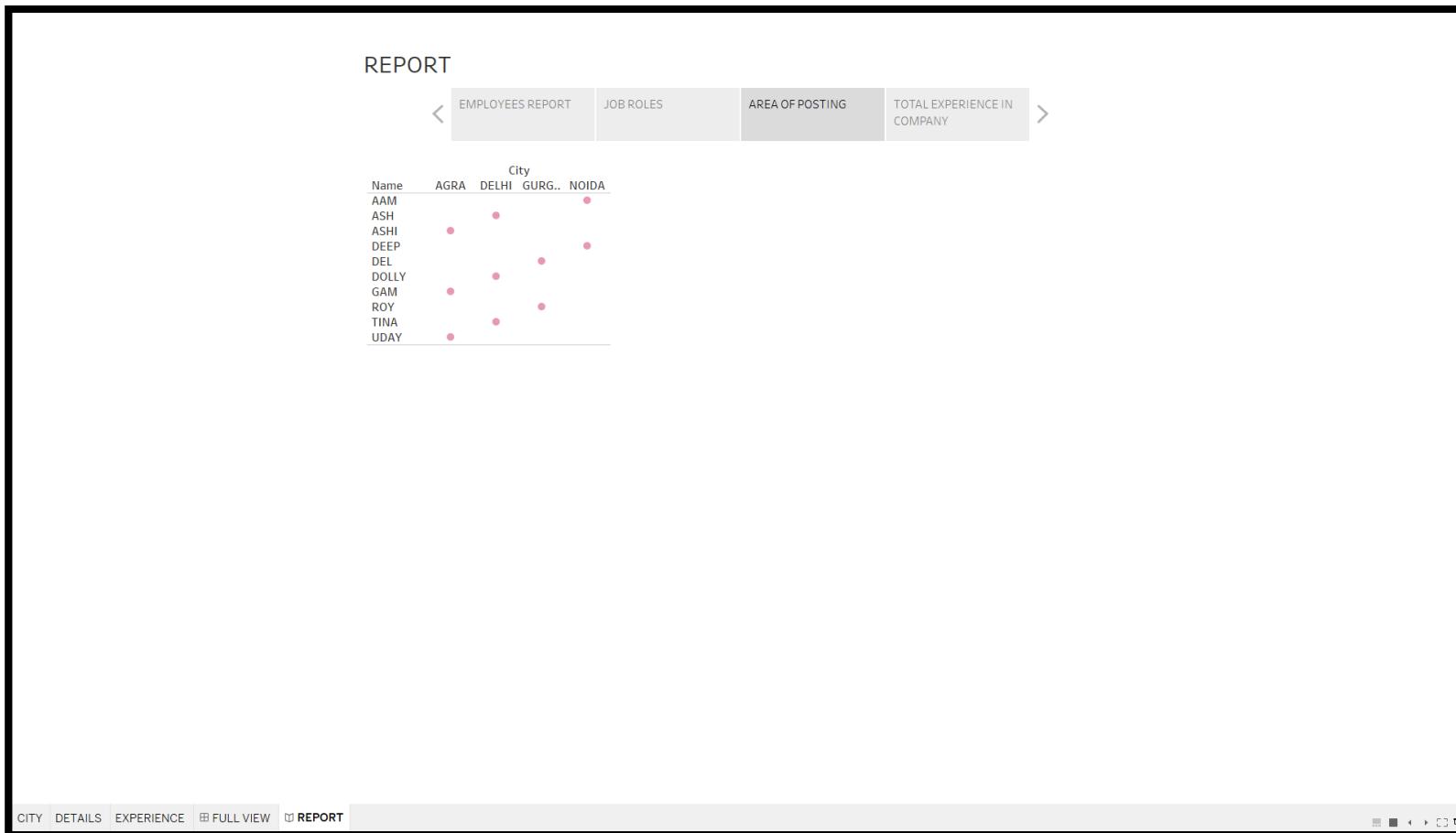
# WORKSHEET: EXPERIENCE



# Adding Story to Dashboard



# Adding Story to Dashboard



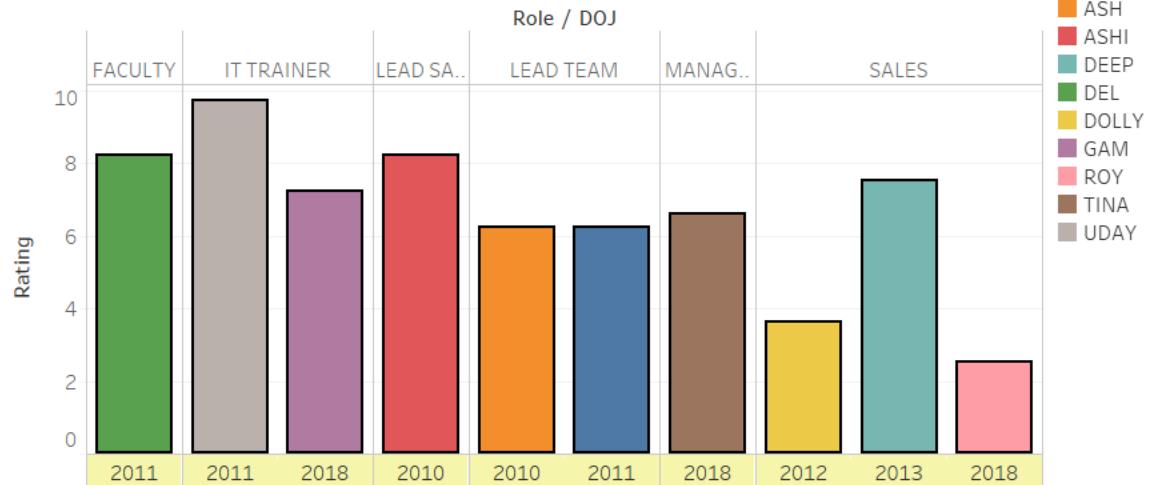
# Adding Story to Dashboard



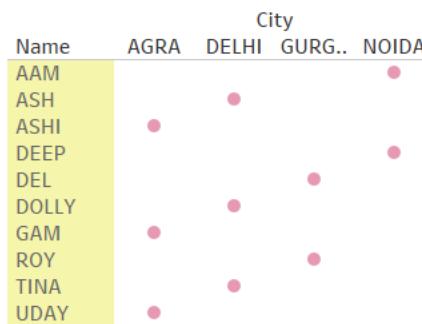
# REPORT



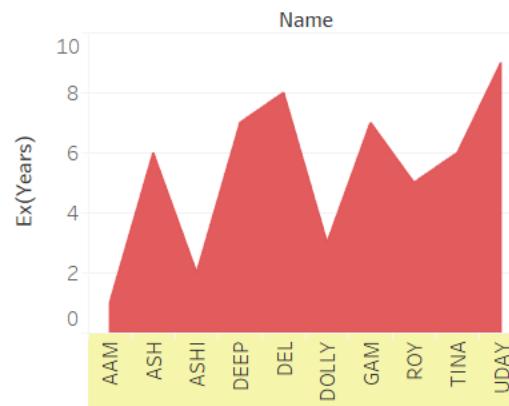
## DETAILS



## CITY



## EXPERIENCE

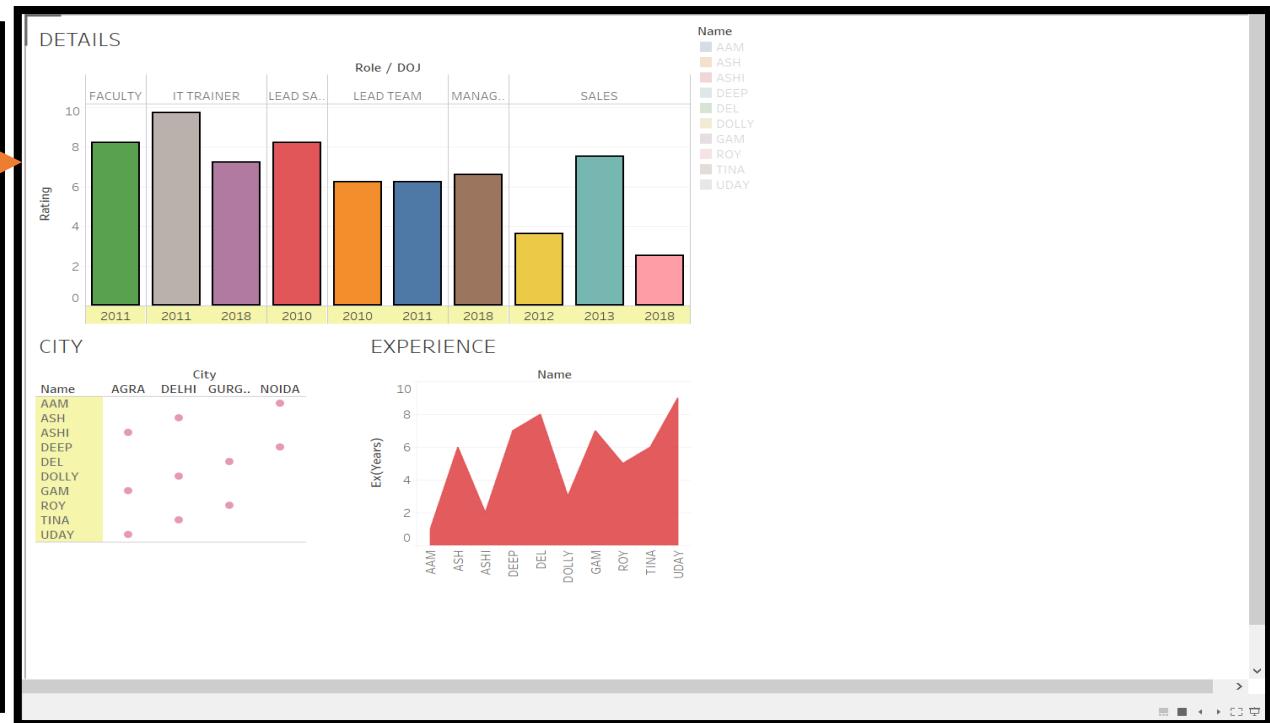
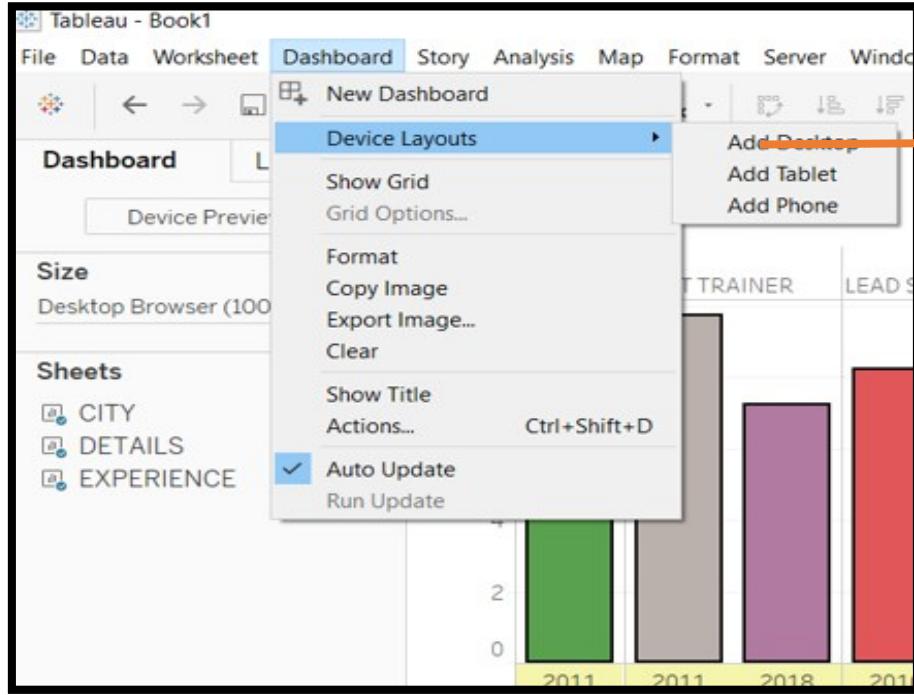


suyashiraiwani

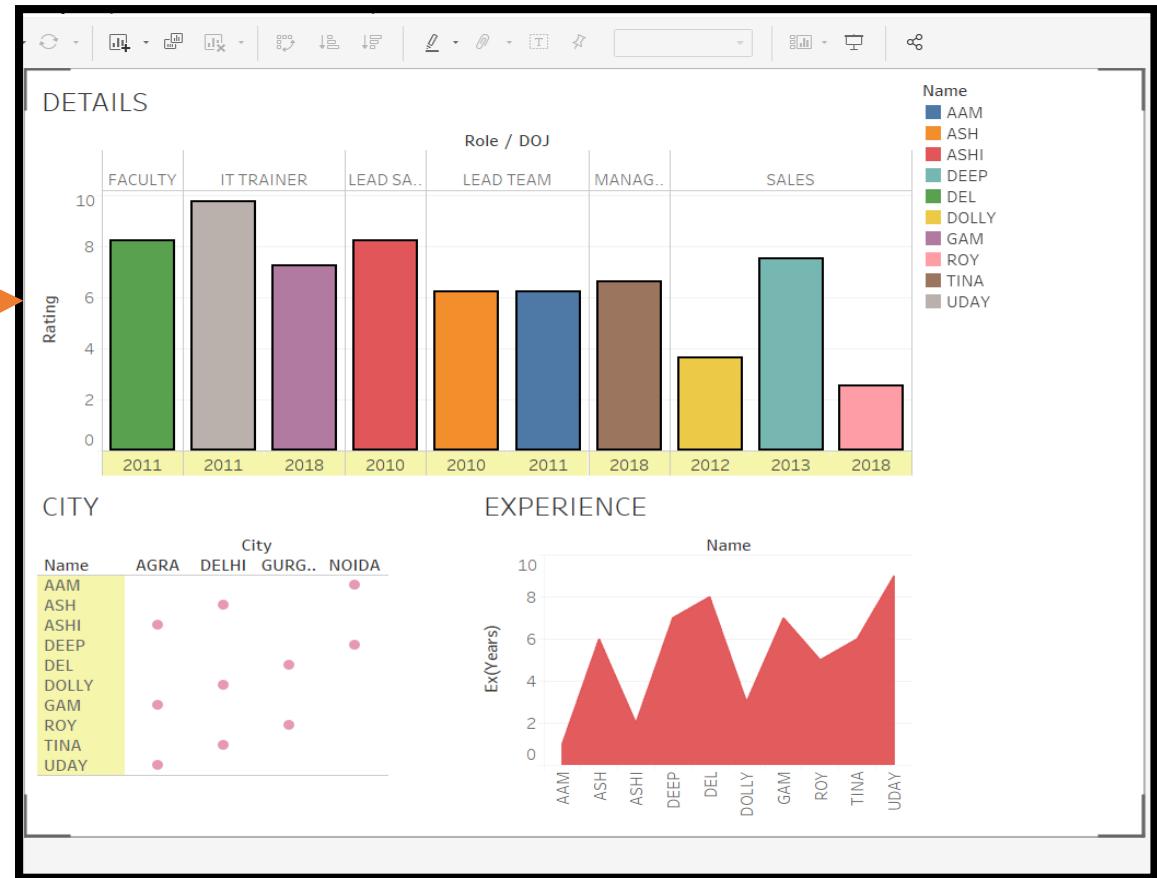
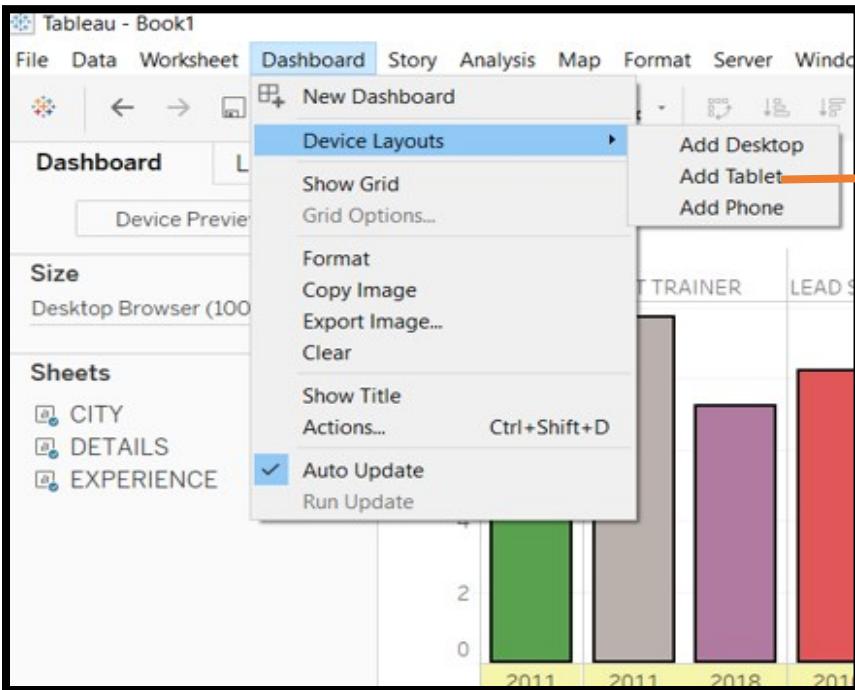
# Device Designer: Preview



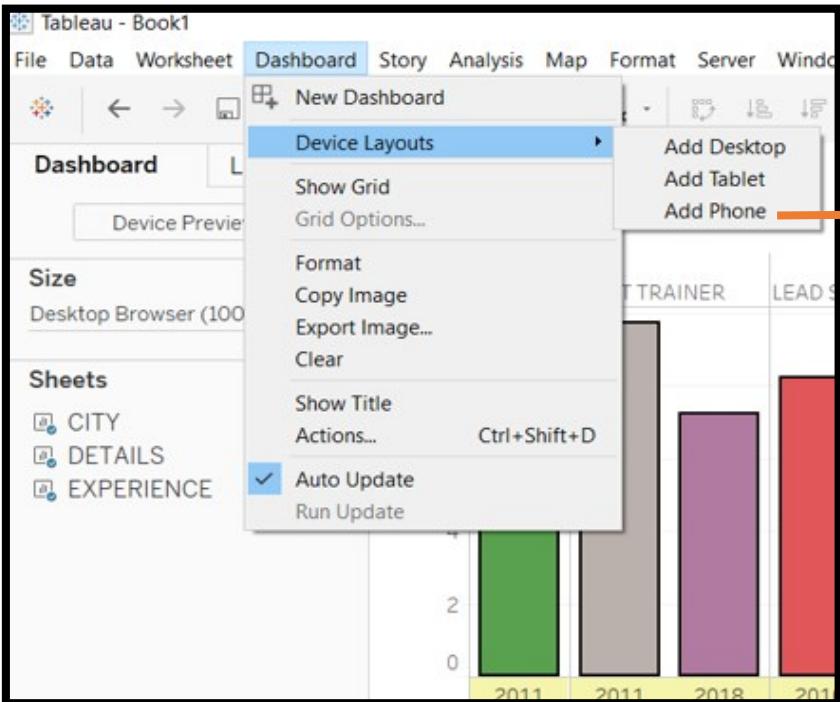
# Device Layouts: Desktop



# Device Layouts: Tablet



# Device Layouts: Phone



# Dashboard formatting: Grids



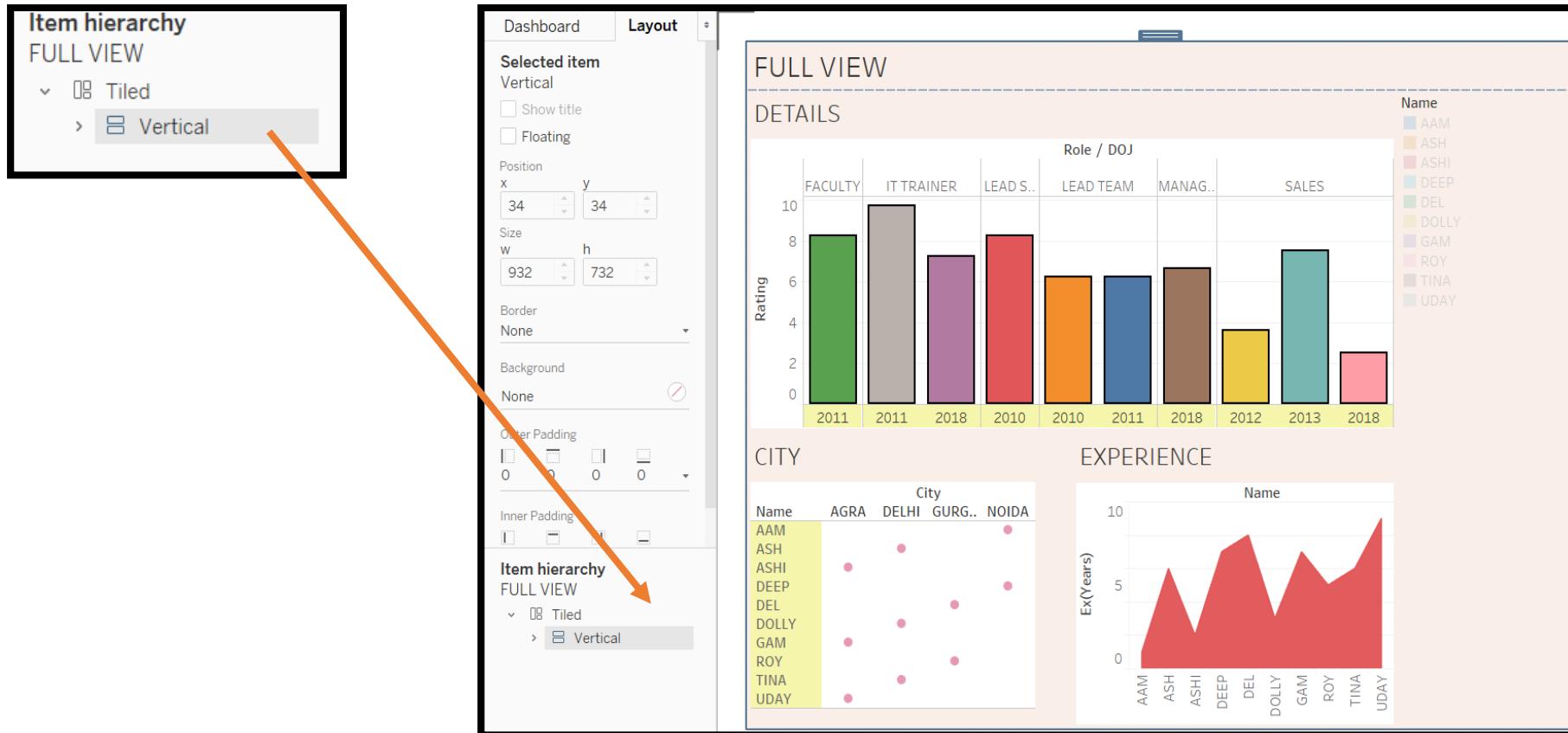
# Dashboard formatting: Show Title

The screenshot illustrates the Tableau interface for dashboard formatting. On the left, a sidebar menu is open with various options: 'New Dashboard', 'Device Layouts', 'Show Grid', 'Grid Options...', 'Format', 'Copy Image', 'Export Image...', 'Clear', 'Show Title' (which is highlighted with a blue selection bar), 'Actions...', 'Ctrl+Shift+D', 'Auto Update' (with a checked checkbox), and 'Run Update'. An orange arrow points from the 'Show Title' option in the sidebar to the title area of a dashboard on the right.

The dashboard itself is titled 'FULL VIEW' and contains several data visualizations:

- Role / DOJ**: A bar chart showing Rating (Y-axis, 0-10) across different roles: FACULTY, IT TRAINER, LEAD SA.., LEAD TEAM, MANAG.., and SALES. The bars are colored green, grey, purple, red, blue, and teal respectively.
- CITY**: A scatter plot showing City (X-axis) versus Name (Y-axis). The cities listed are AGRA, DELHI, GURG.., and NOIDA. Data points are represented by small pink dots.
- EXPERIENCE**: A line chart showing Experience in years (Ex(Years)) for various names: AAM, ASH, ASHI, DEEP, DEL, DOLLY, GAM, ROY, TINA, and UDAY. The line shows fluctuating experience levels over time.
- Name**: A legend mapping names to colors: AAM (blue), ASH (orange), ASHI (red), DEEP (teal), DEL (green), DOLLY (yellow), GAM (purple), ROY (pink), TINA (brown), and UDAY (grey).

# Dashboard formatting: Item hierarchy



The screenshot illustrates the 'Item hierarchy' feature in Tableau, specifically the 'Vertical' layout. A large orange arrow points from the top-left 'Item hierarchy' panel to the bottom-right dashboard preview.

**Item hierarchy**  
FULL VIEW  
↳ Tiled  
↳ Vertical

**Selected item**  
Vertical  
 Show title  
 Floating  
Position  
x 34 y 34  
Size  
w 932 h 732  
Border  
None  
Background  
None  
Outer Padding  
0 0 0 0  
Inner Padding  
0 0 0 0  
**Item hierarchy**  
FULL VIEW  
↳ Tiled  
↳ Vertical

**Dashboard Layout**

**FULL VIEW**

**DETAILS**

Role / DOJ

	FACULTY	IT TRAINER	LEAD S...	LEAD TEAM	MANAG...	SALES
Rating	8	10	8	6	7	8
Year	2011	2011	2018	2010	2011	2013

**CITY**

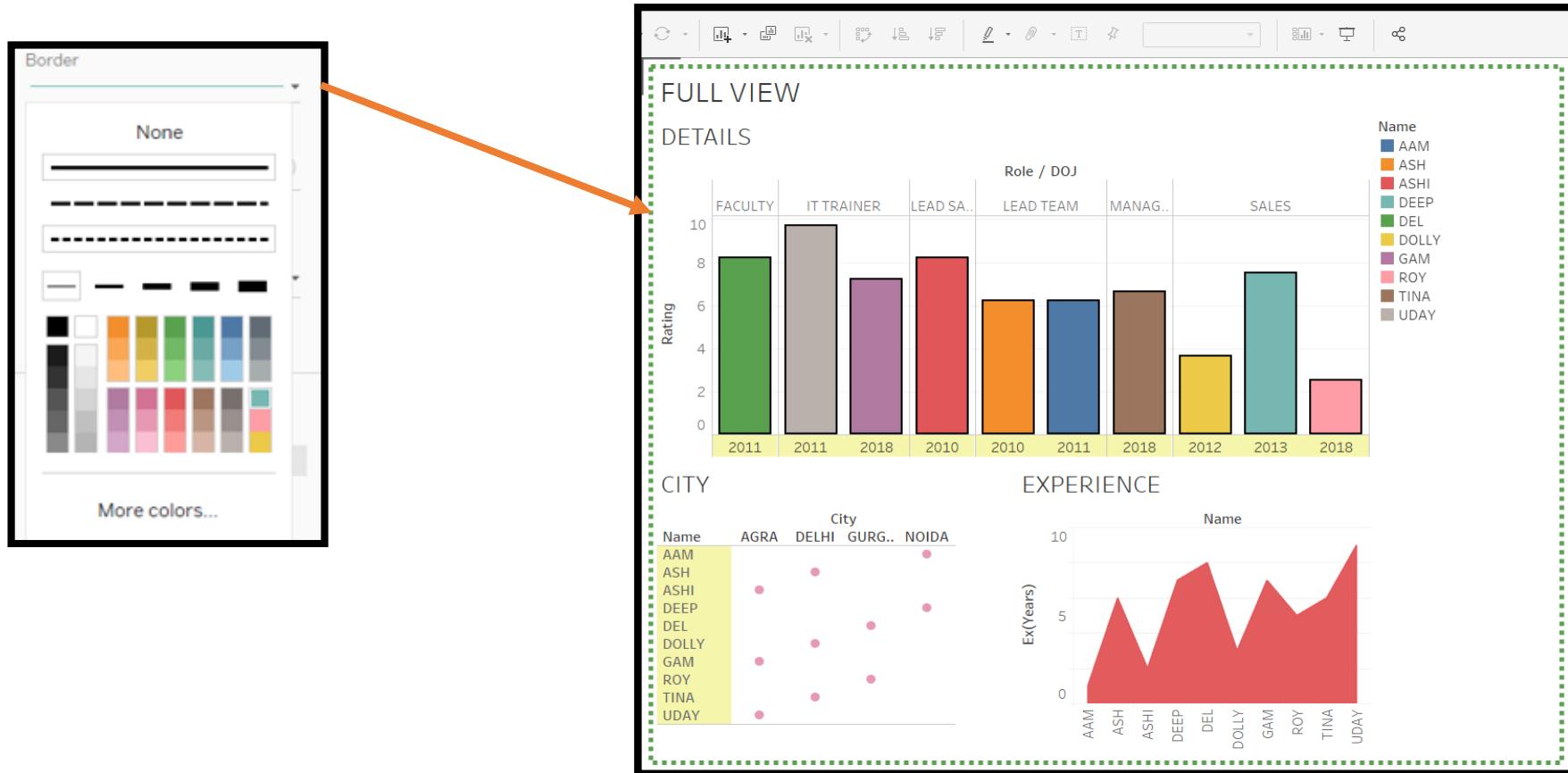
Name	AGRA	DELHI	GURG..	NOIDA		
City	AAM	ASH	ASHI	DEEP		
AAM	.	.	.	.		
ASH	.	.	.	.		
ASHI	.	.	.	.		
DEEP	.	.	.	.		
Name	DEL	DOLLY	GAM	ROY	TINA	UDAY
DEL	.	.	.	.	.	.
DOLLY	.	.	.	.	.	.
GAM	.	.	.	.	.	.
ROY	.	.	.	.	.	.
TINA	.	.	.	.	.	.
UDAY	.	.	.	.	.	.

**EXPERIENCE**

Ex(Years)

Name	Ex(Years)
AAM	0
ASH	6
ASHI	2
DEEP	8
DEL	7
DOLLY	4
GAM	6
ROY	5
TINA	9
UDAY	0

# Dashboard formatting: Border



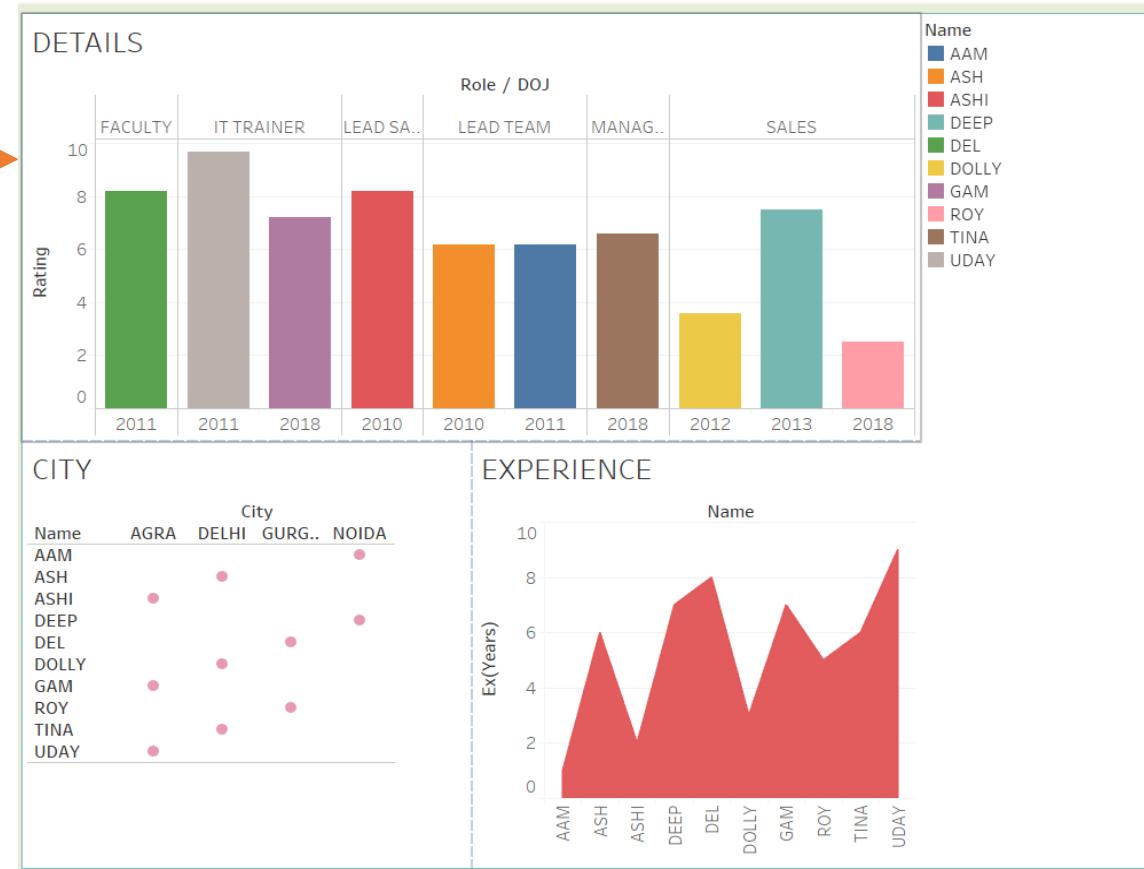
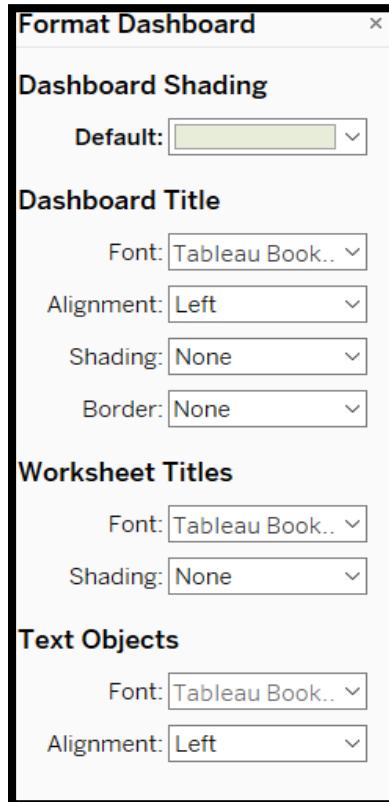
# Dashboard formatting: Background



# Change Background of selected sheet



# Formatting: Shading



# Formatting: Dashboard Title

**Dashboard Title**

Font: Tw Cen MT Condensed Extra Bold

Alignment: Center

Shading: 76%

Border: Dotted

FULL VIEW

DETAILS

Role / DOJ

Rating

FACULTY

Year	Rating
2011	8.5
2011	10.0
2018	7.5
2010	8.5

IT TRAINER

Year	Rating
2011	10.0
2018	7.5

LEAD SA...

Year	Rating
2010	8.5
2011	6.0
2018	6.5

LEAD TEAM

Year	Rating
2010	6.0
2011	6.5
2012	3.5

MANAG...

Year	Rating
2011	6.5
2012	6.5
2013	7.5

SALES

Year	Rating
2013	7.5
2018	2.5

Name

Name
AAM
ASH
ASHI
DEEP
DEL
DOLLY
GAM
ROY
TINA
UDAY

CITY

Name	AGRA	DELHI	GURG...	NOIDA
AAM				
ASH				
ASHI	.			
DEEP				
DEL				
DOLLY				
GAM	.			
ROY		.		
TINA		.		
UDAY	.			

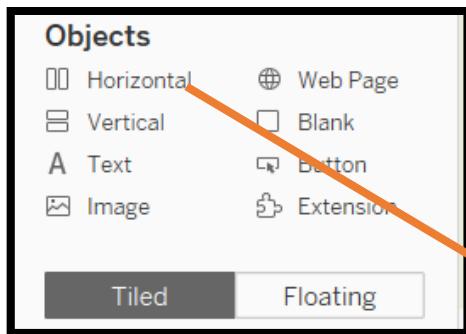
EXPERIENCE

Name	Ex(Years)
AAM	0
ASH	6
ASHI	2
DEEP	8
DEL	7
DOLLY	3
GAM	7
ROY	5
TINA	8
UDAY	9

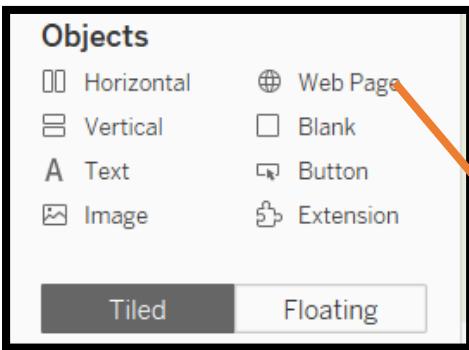
# Formatting: Worksheet Titles



# Dashboard objects



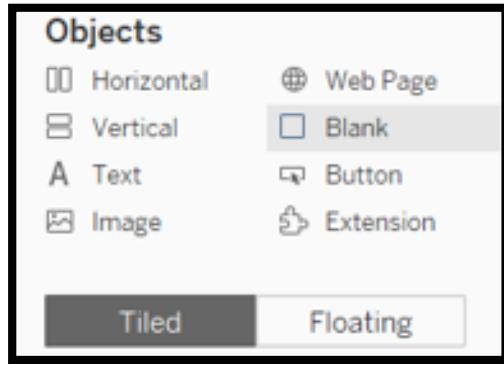
# Dashboard objects



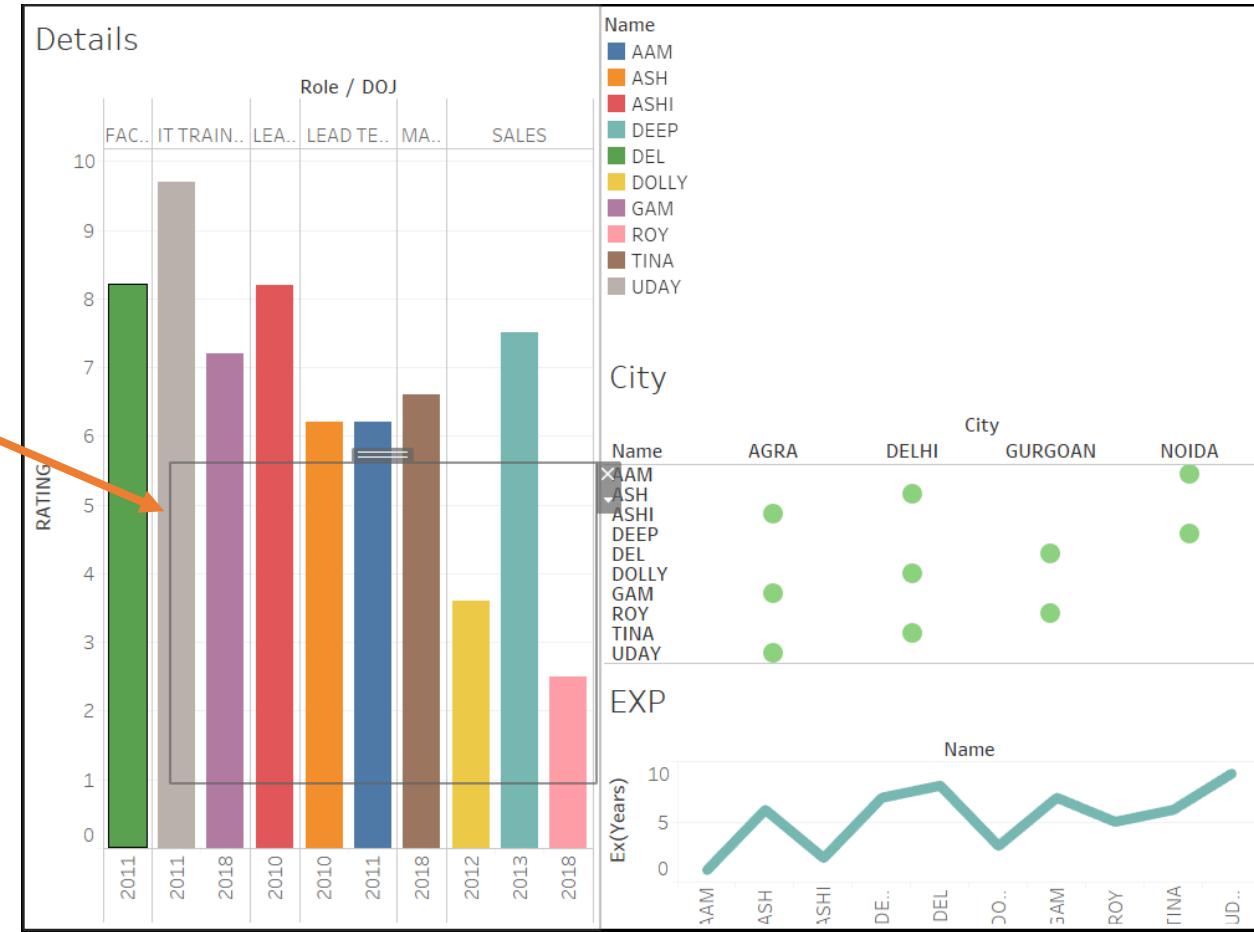
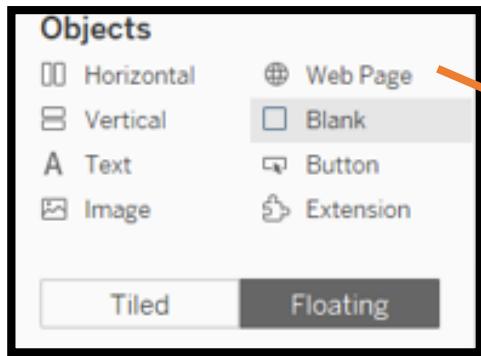
# Dashboard objects



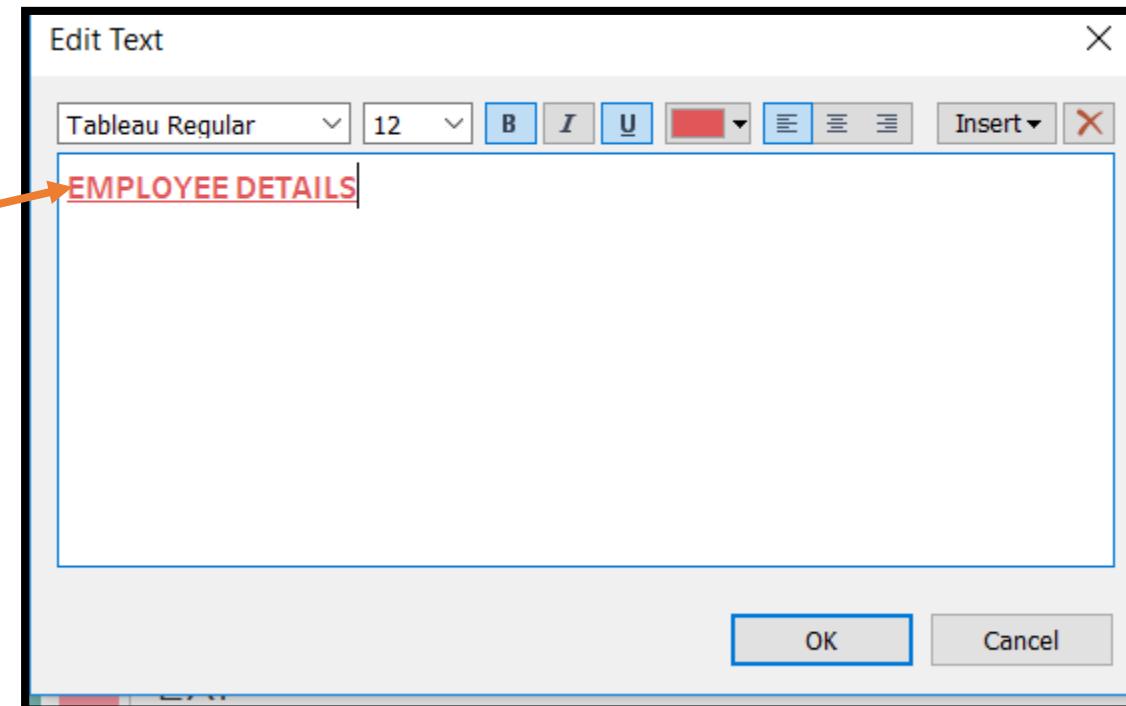
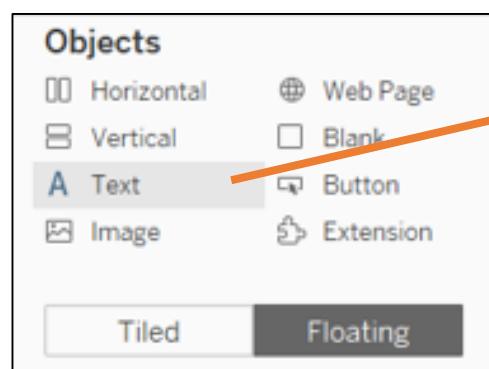
# Dashboard objects

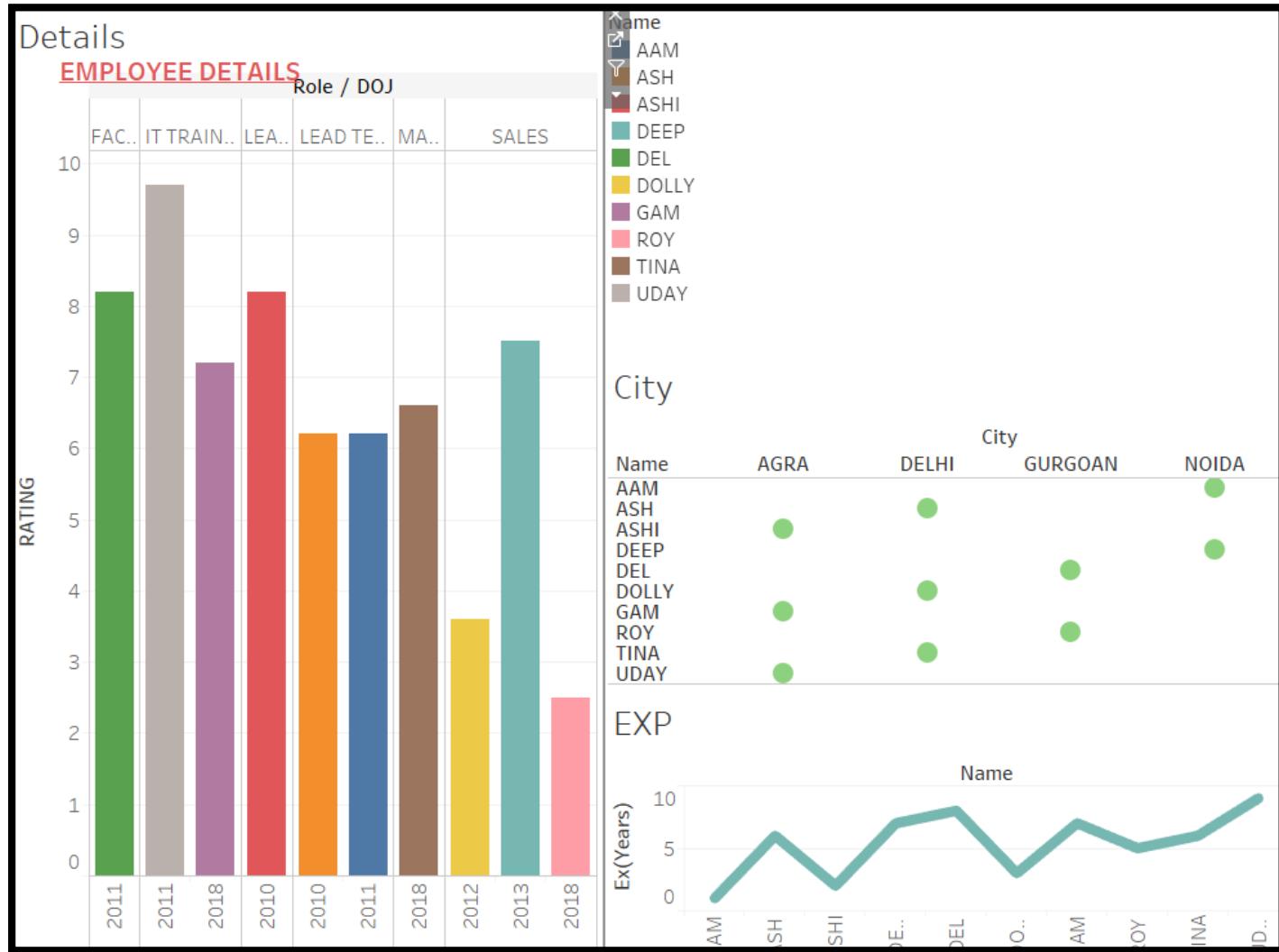


# Dashboard objects

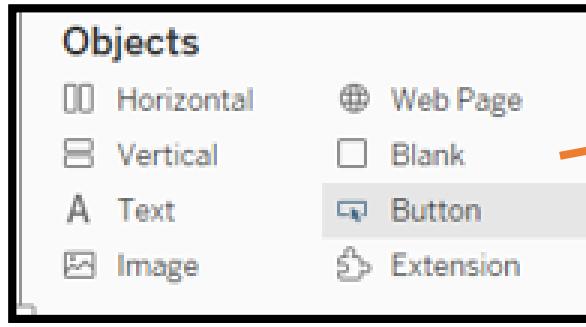


# Dashboards objects





# Dashboards objects

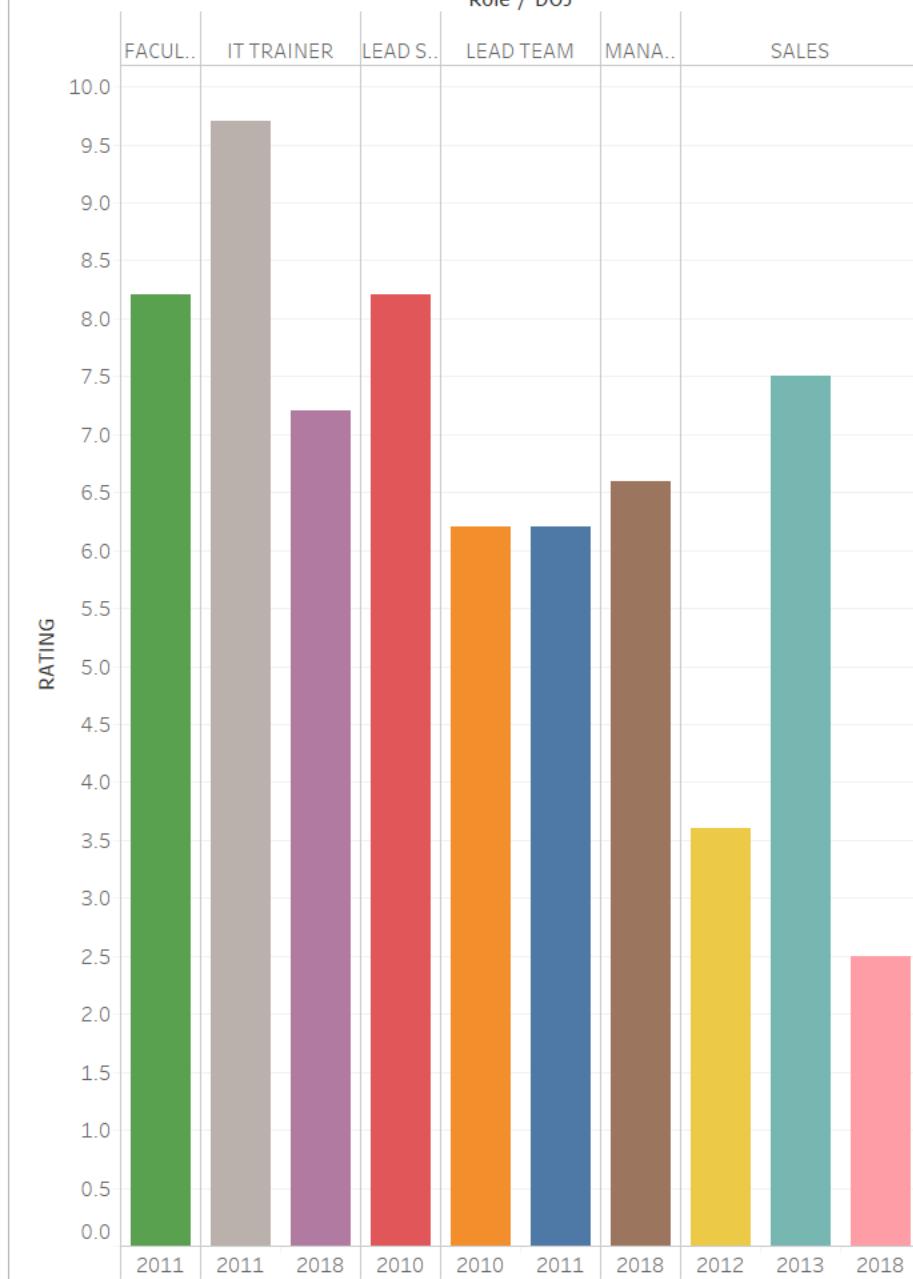




## Details

Name
AAM
ASH
ASHI
DEEP
DEL
DOLLY
GAM
ROY
TINA
UDAY

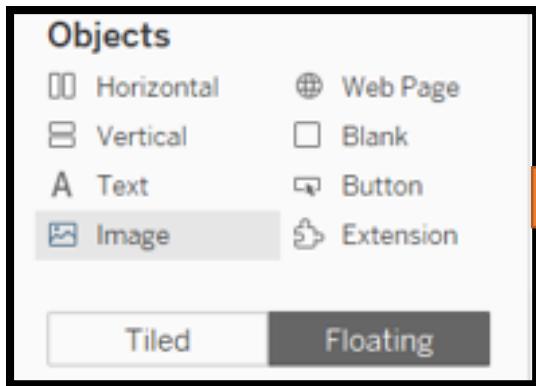
Role / DOJ



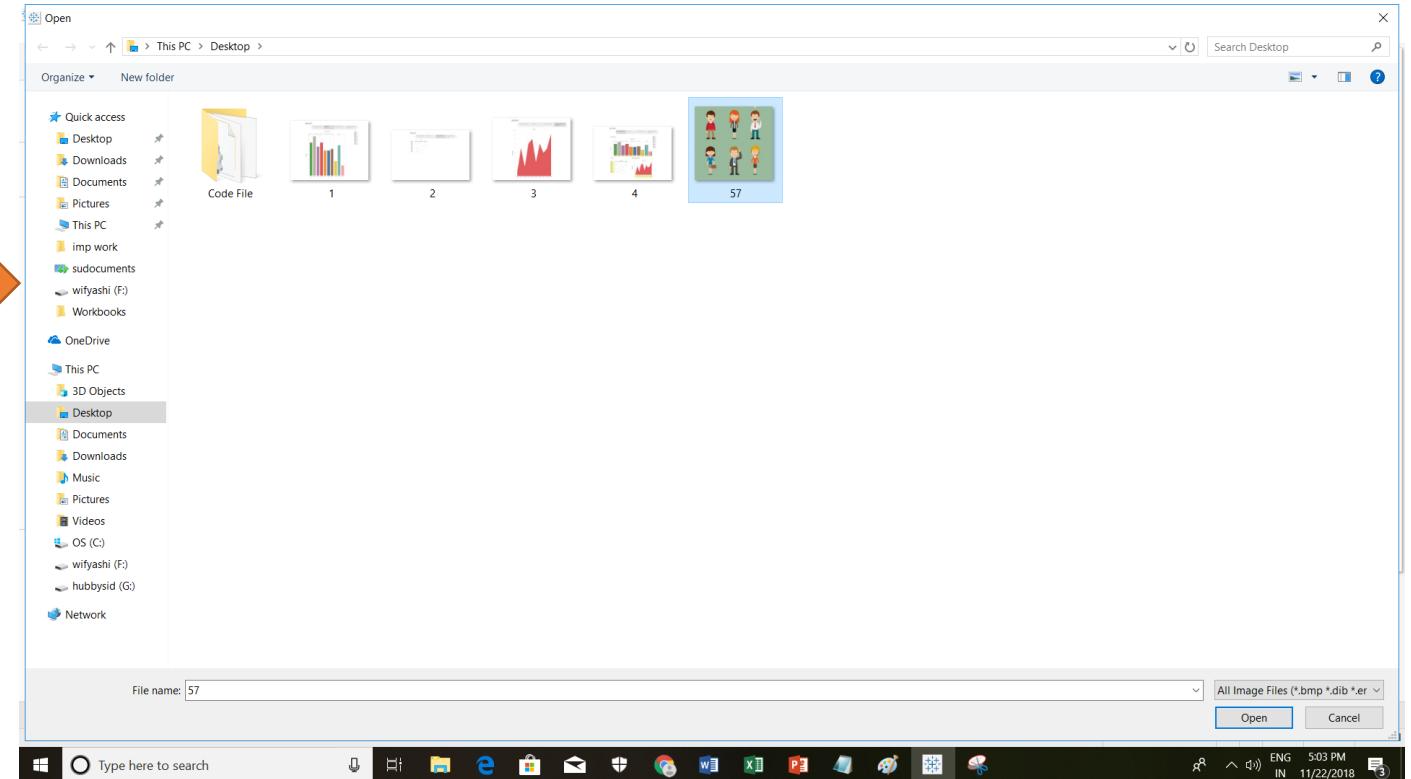
suyashiraiwani

99

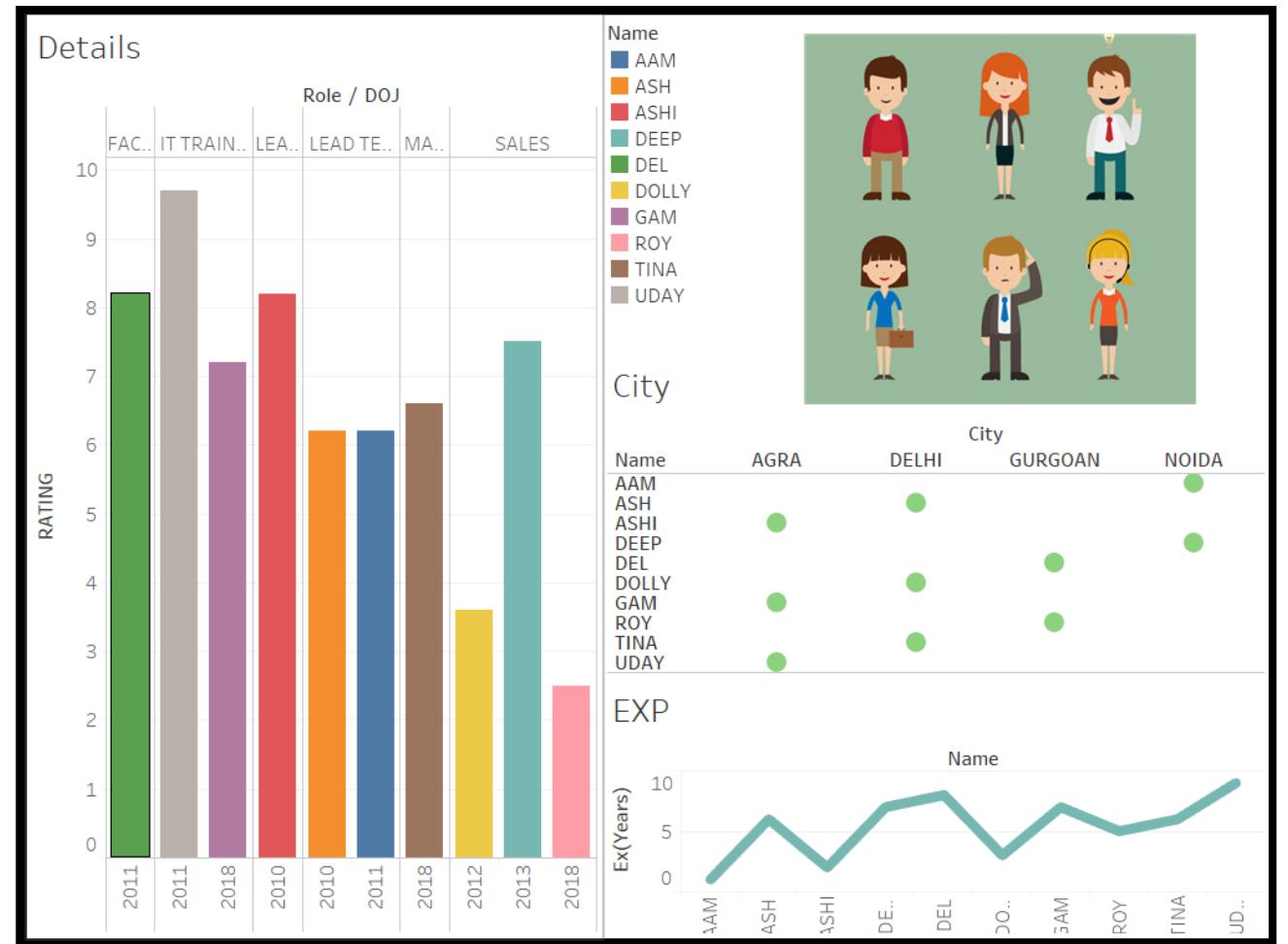
# Dashboard objects



BROWSE

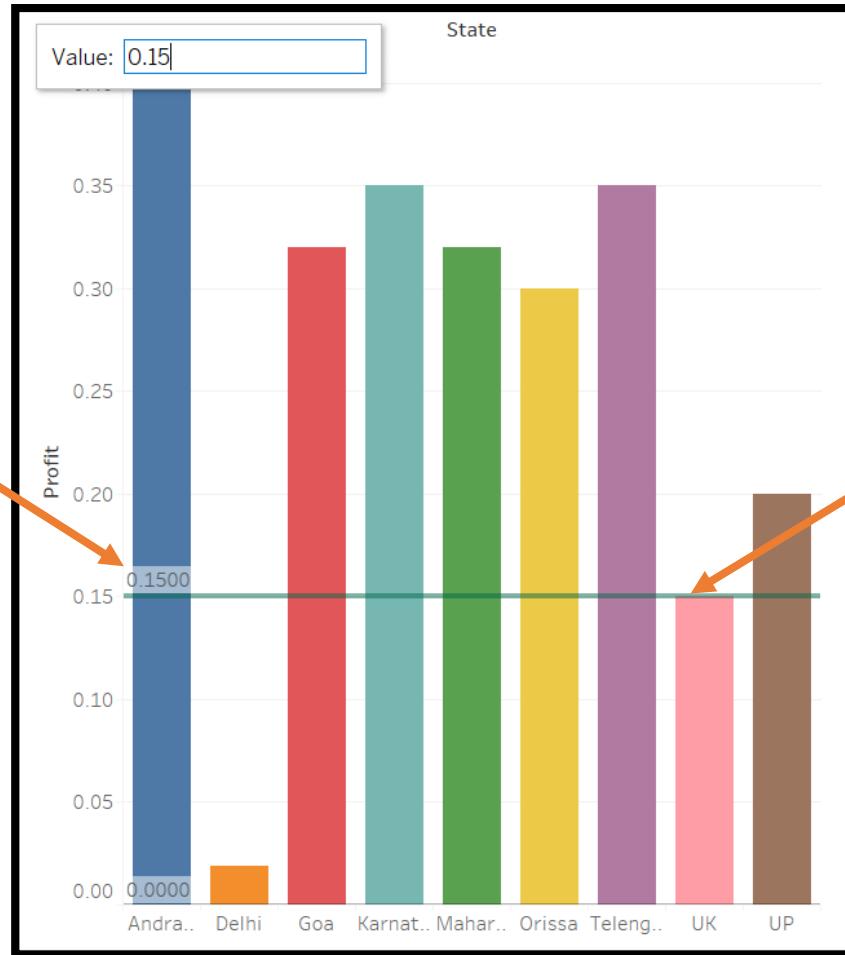
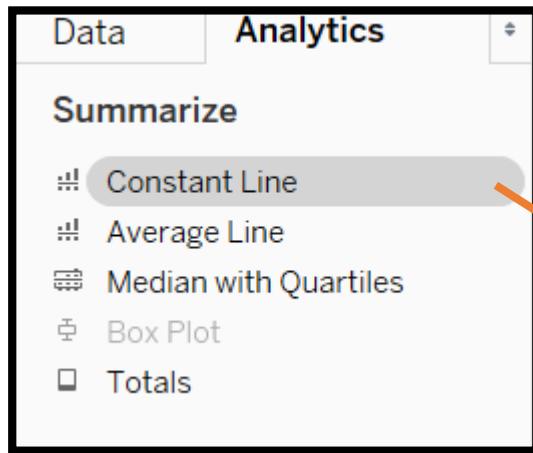


# Dashboard objects

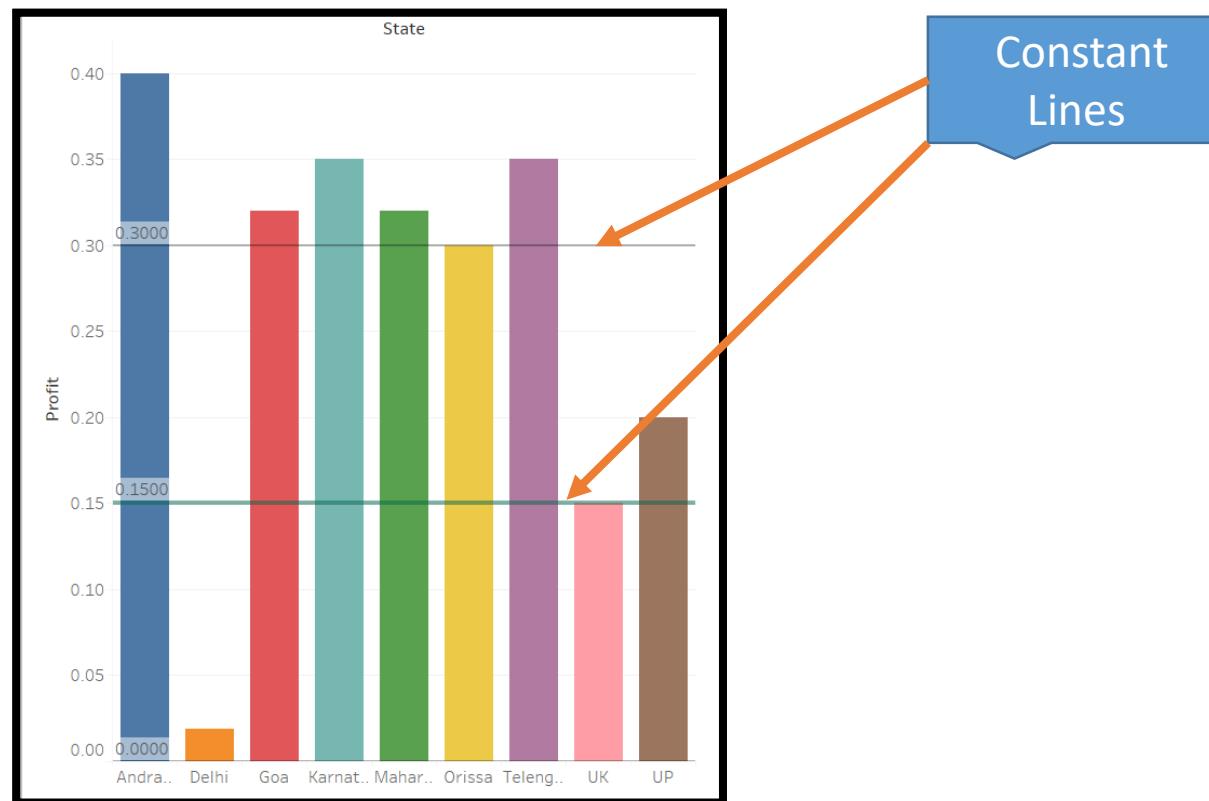


# Tableau : Constant line ,Average & Trendlines

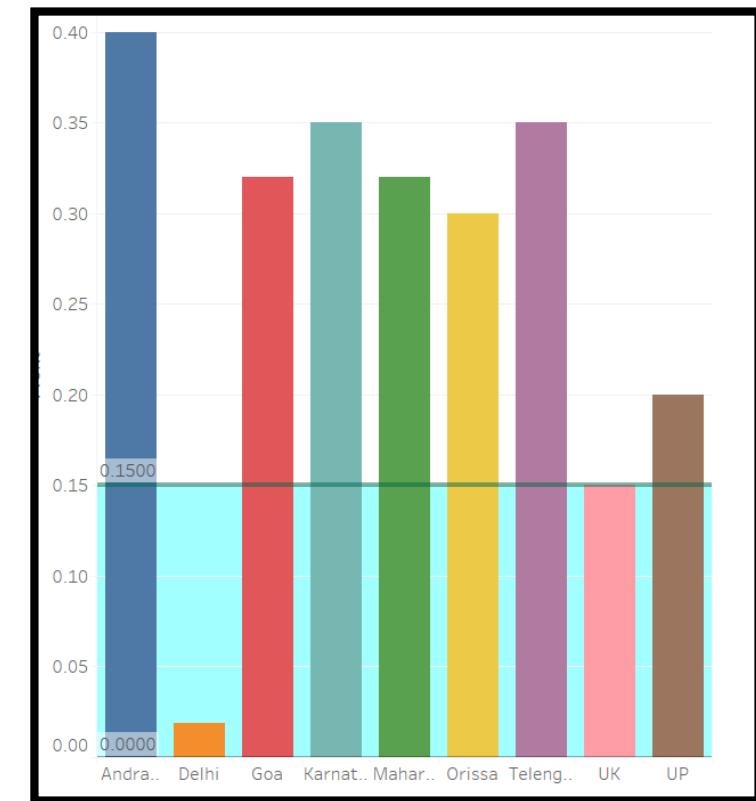
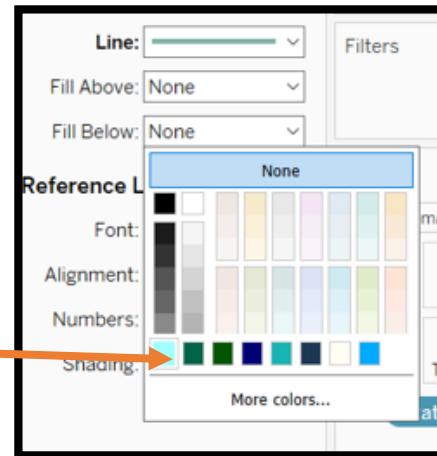
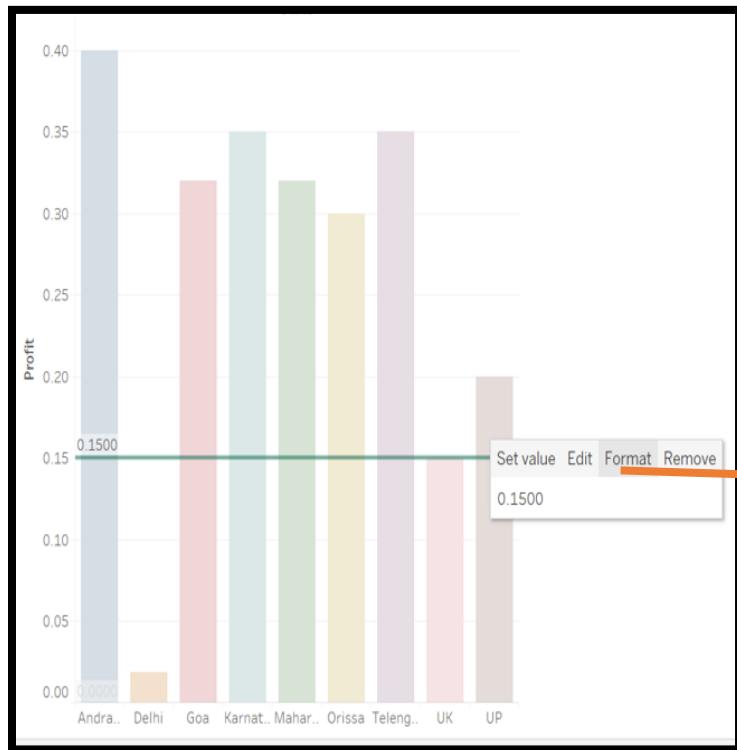
# Constant Line



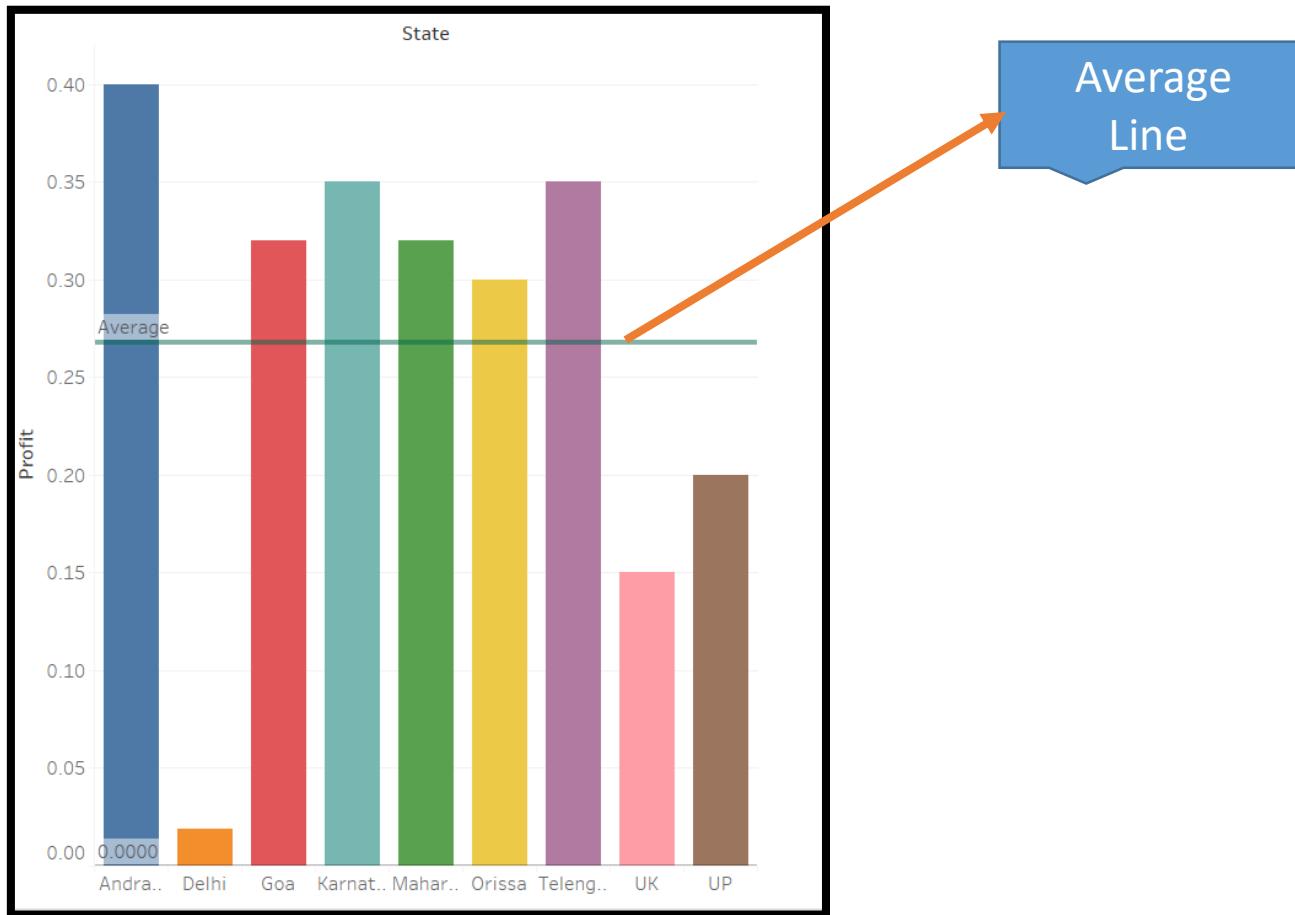
# Constant Line



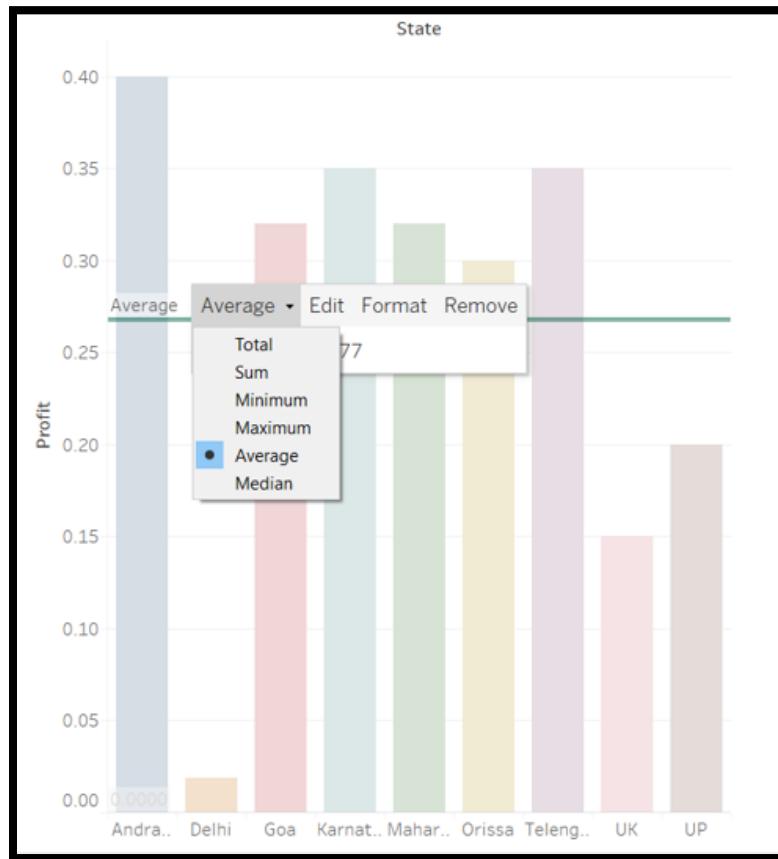
# Constant Line



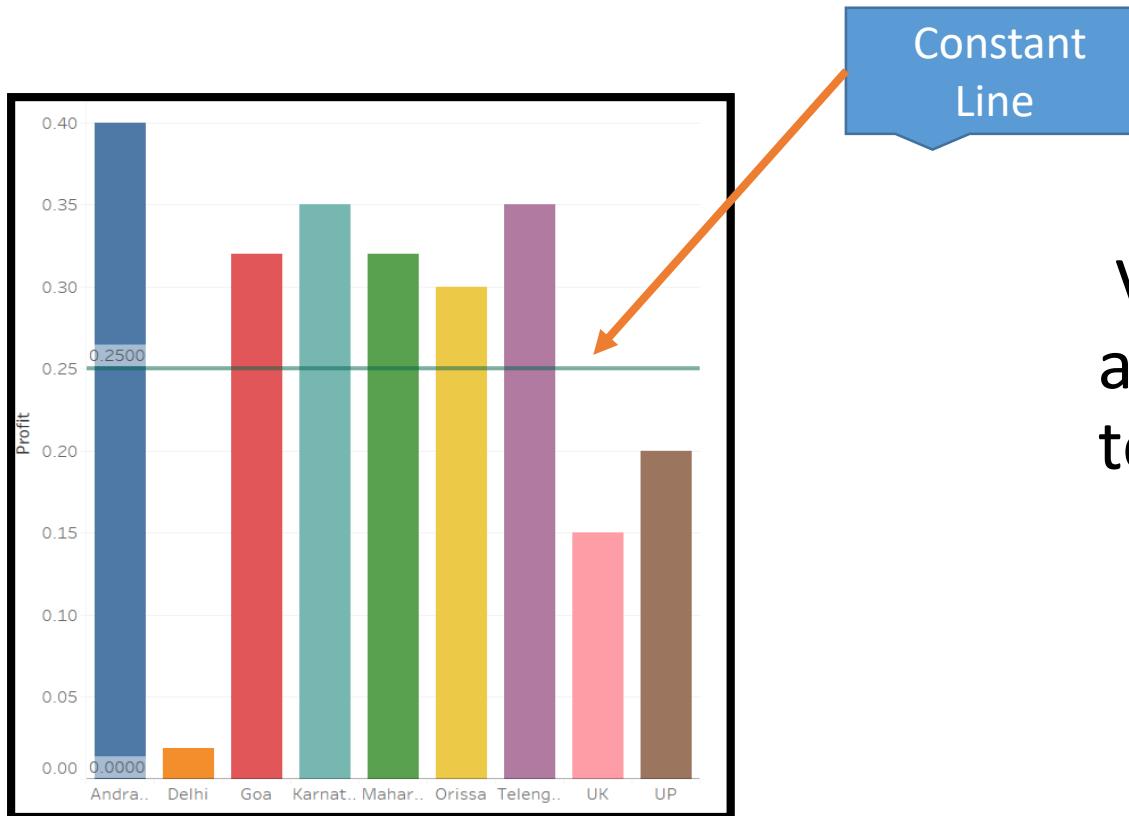
# Average line



# Drill now for more options



# Constant Line



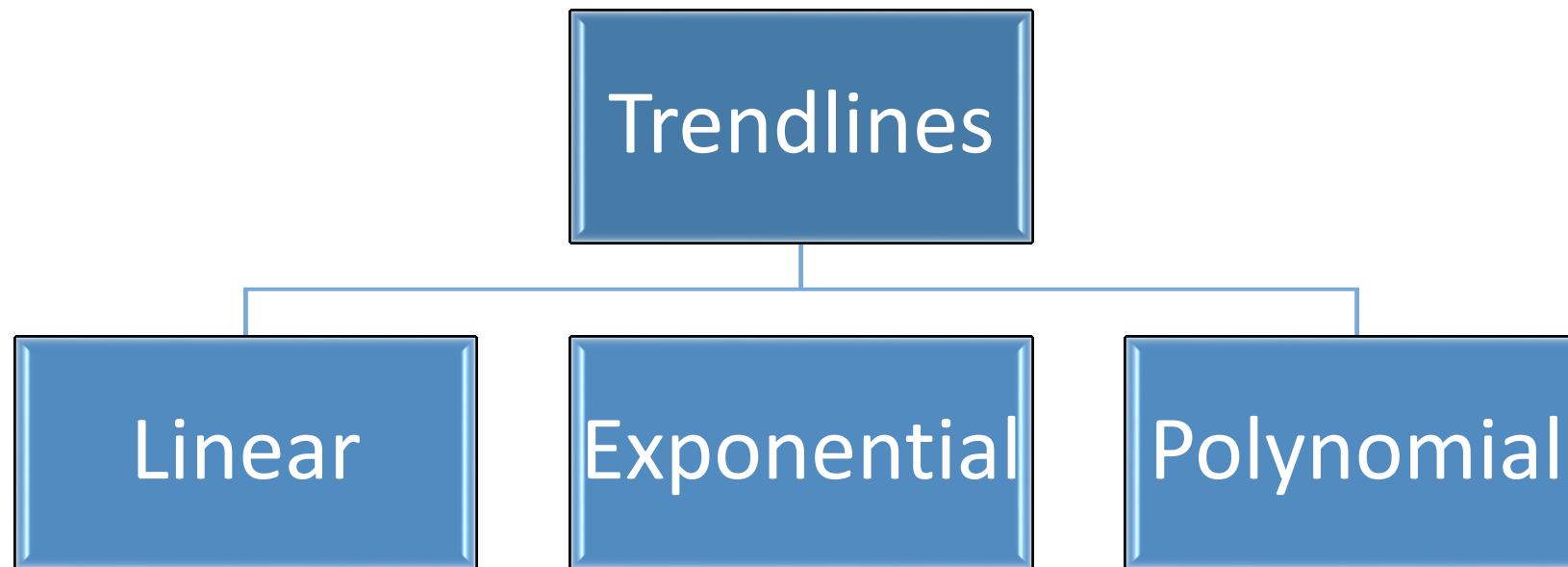
Visually represents an axis value as a **line** perpendicular to the axis to which it belongs

# Trendlines

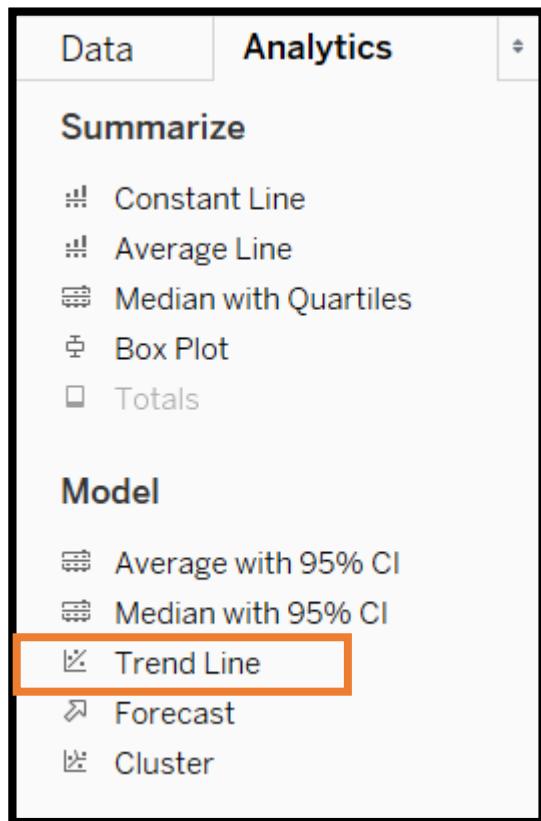
Trend lines are used to predict the continuation of a certain trend of a variable



# Trendlines : Models in Tableau

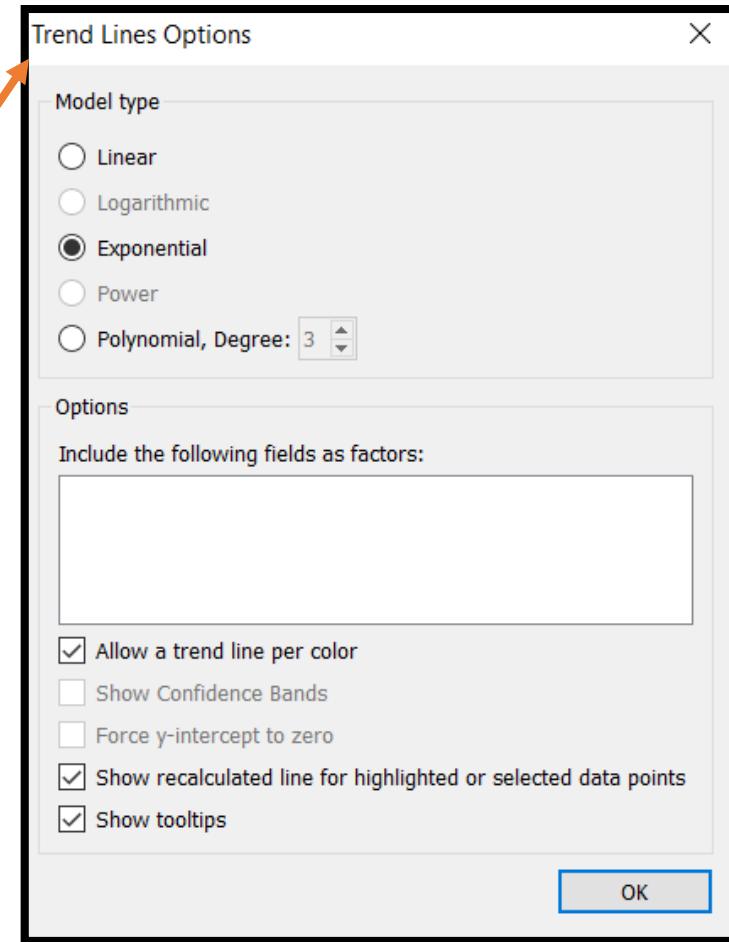


# Trendlines : Selection

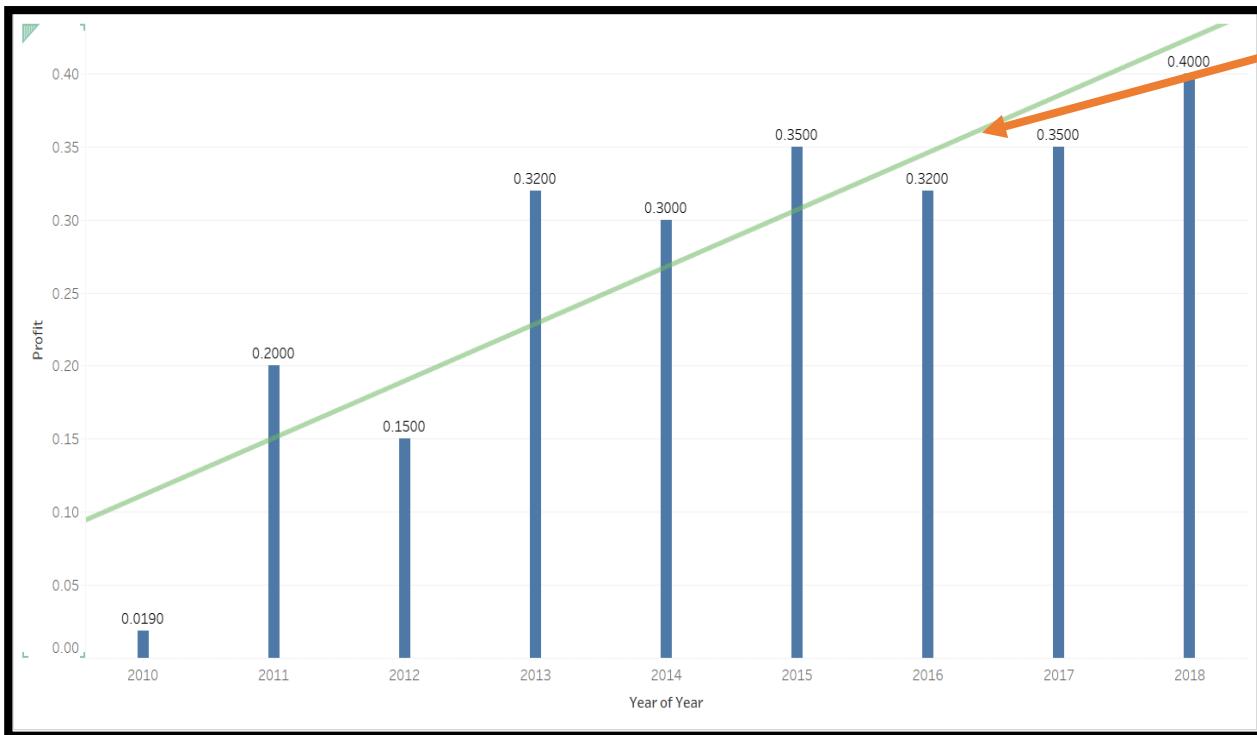


Right Click  
on Trend  
Line

- Describe Trend Line...
- Format...
- Show Trend Lines
- Edit Trend Lines...
- Describe Trend Model...

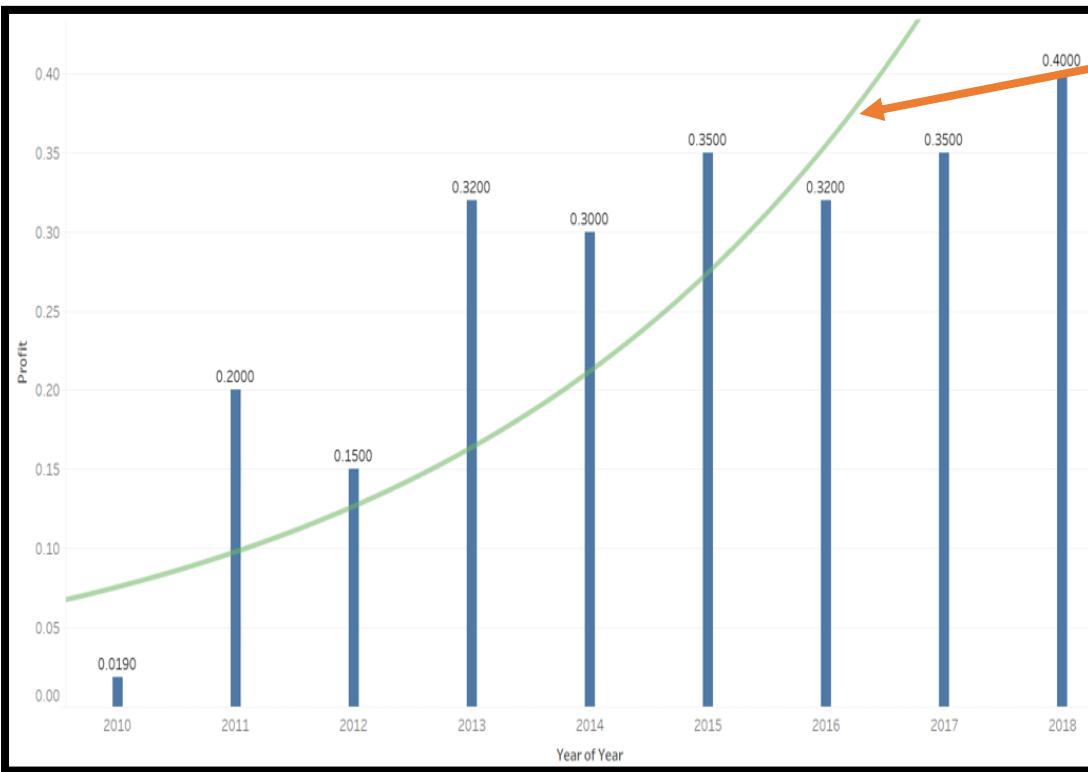


# Trendlines : Linear Model



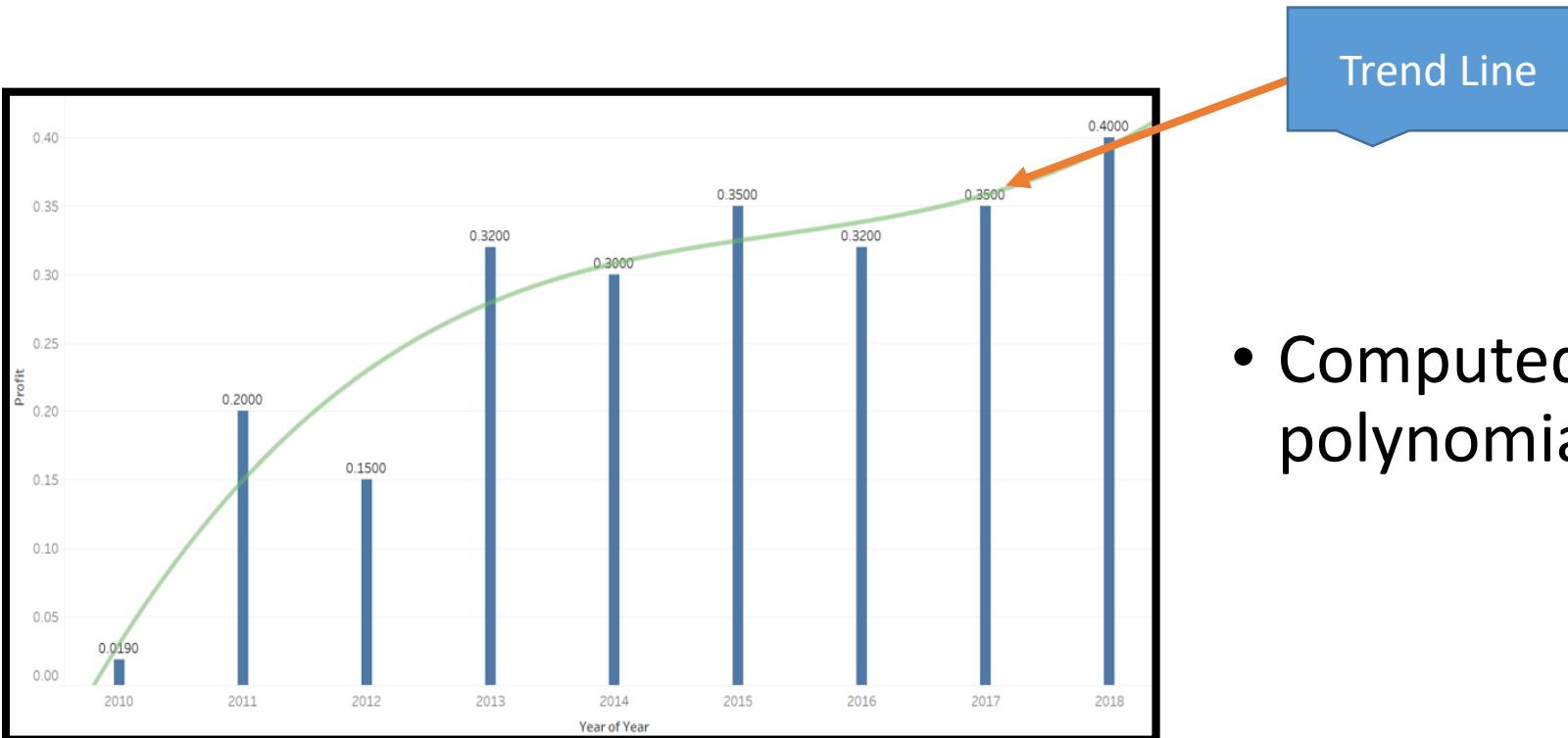
- Computed for sum of measure value and time dimension.

# Trendlines : Exponential Model



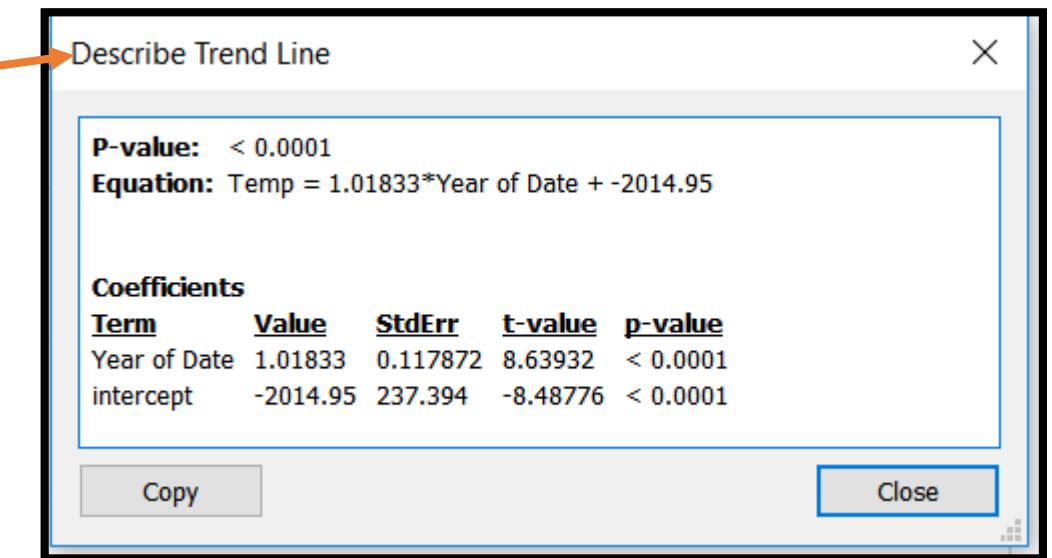
- Computed for natural log of sum of measures and time dimension

# Trendlines : Polynomial Model

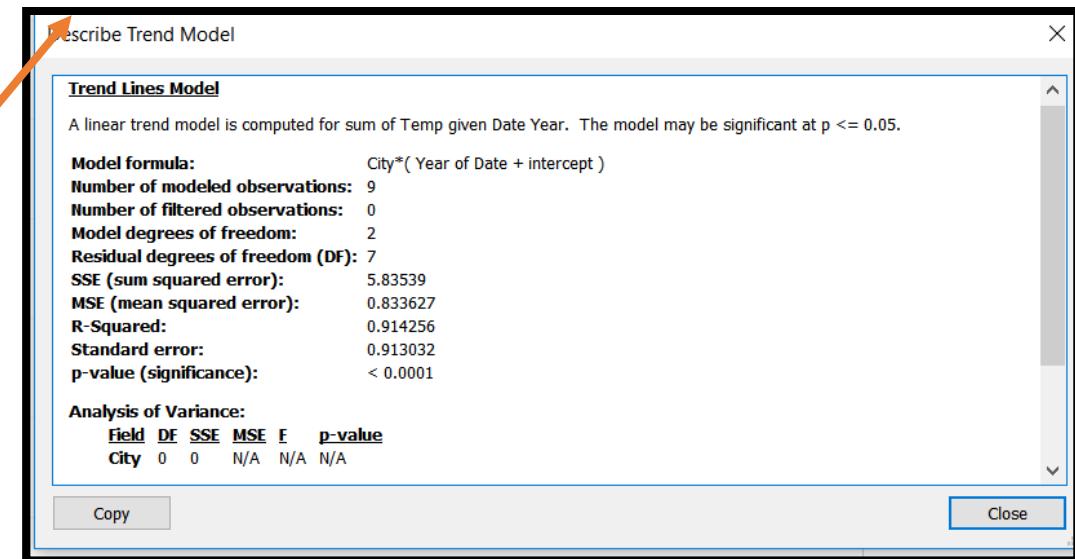
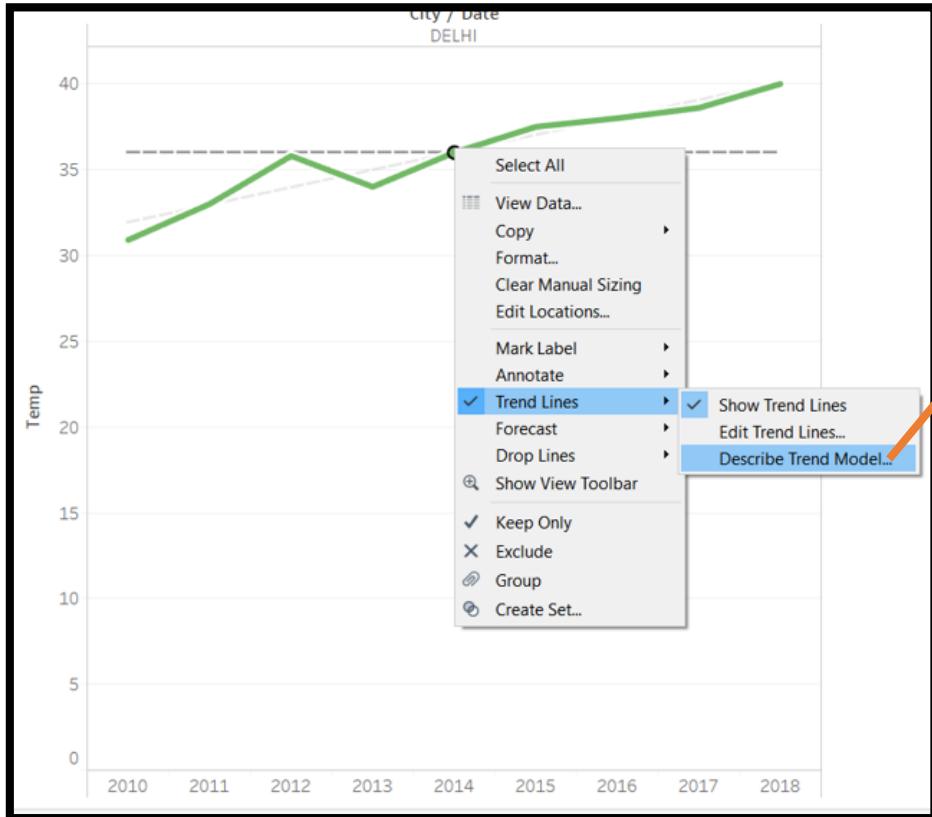


- Computed for polynomial trend

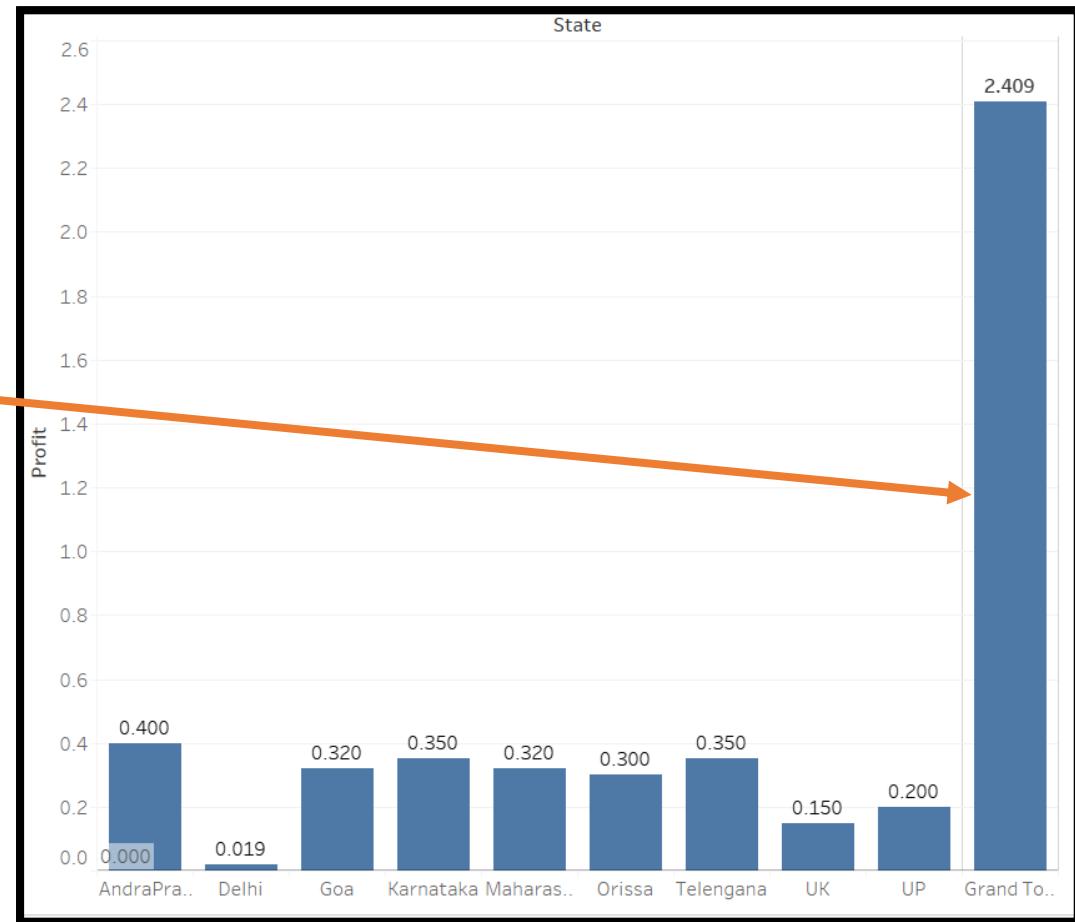
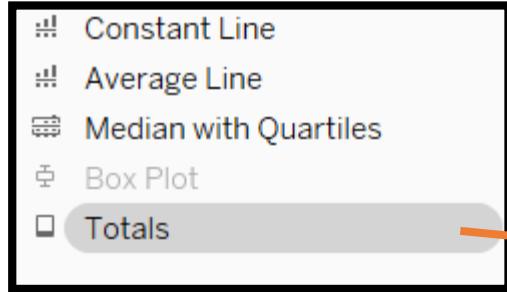
# Trendlines : Description



# Trendlines

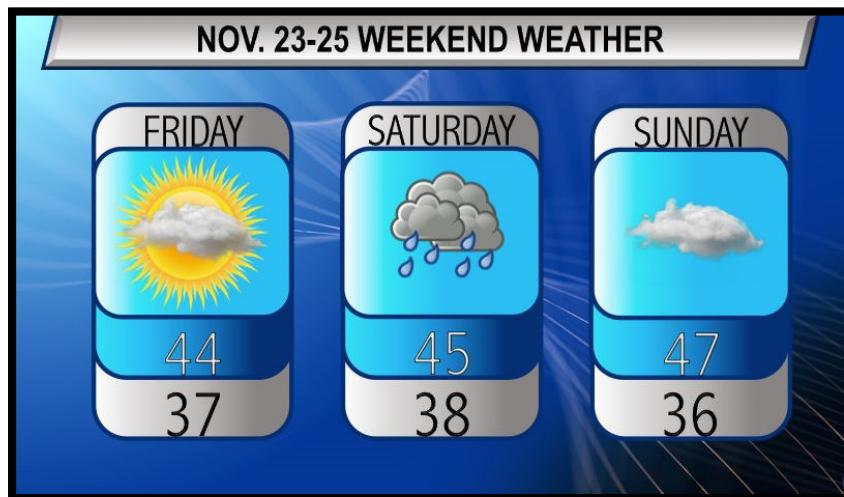


# Including Totals



# Tableau:Forecasting

# Forecasting



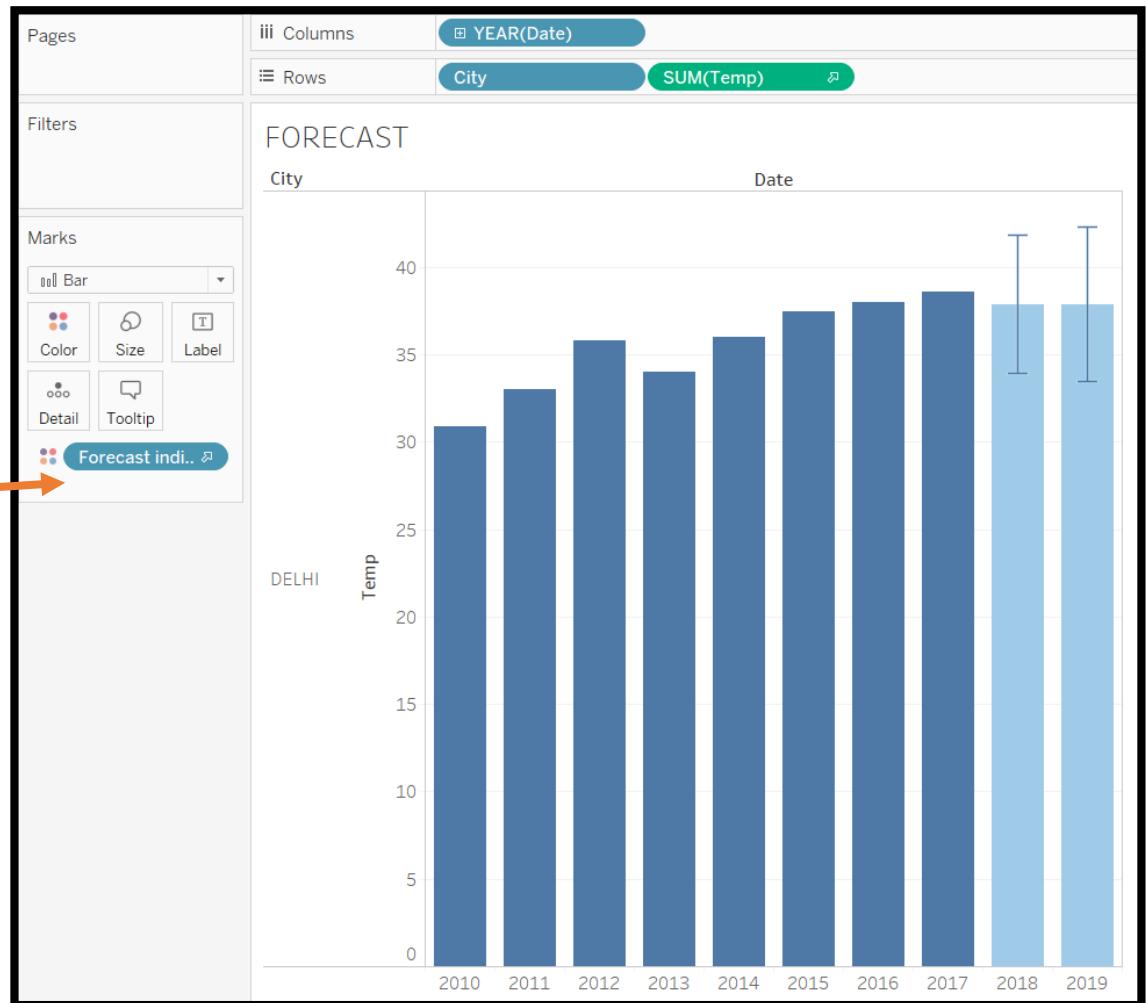
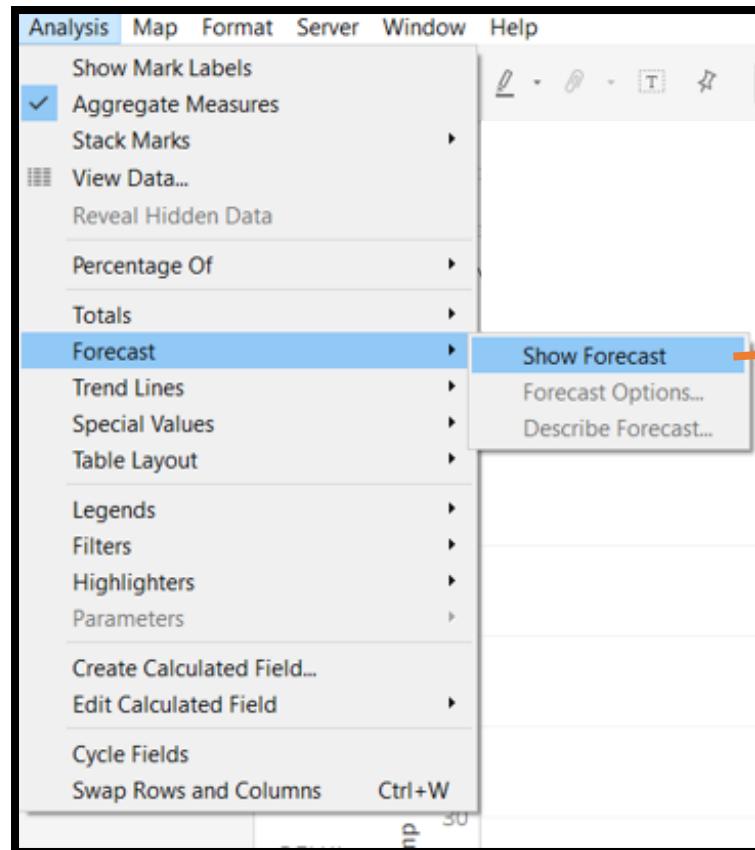
Making **predictions** of the **future** based on **past** and **present** data commonly by analysis of trends

# Forecasting

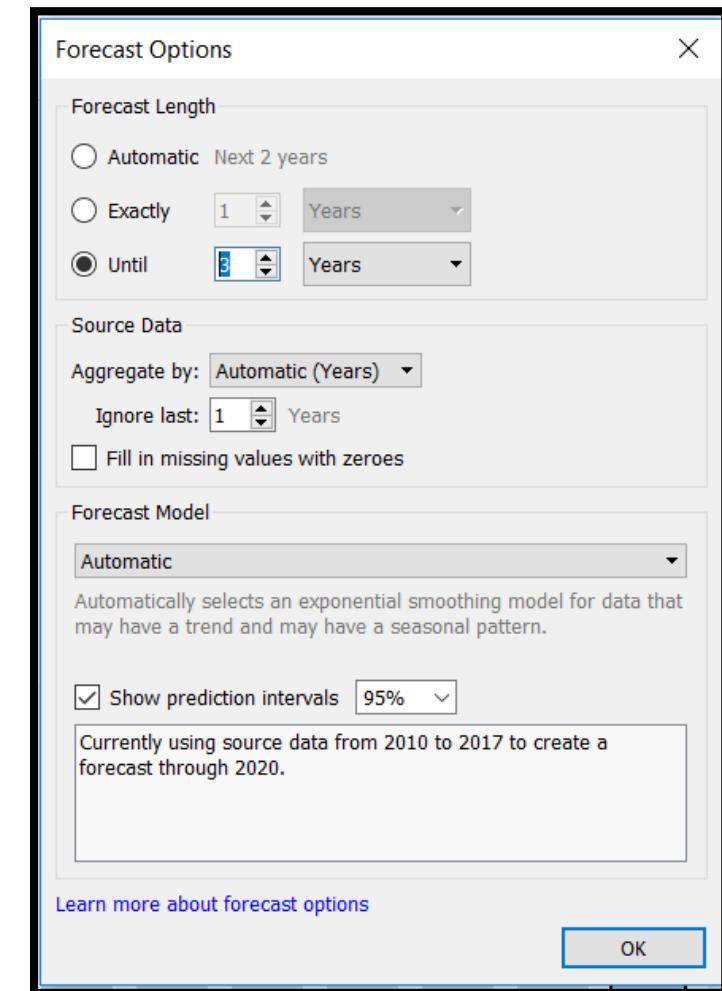
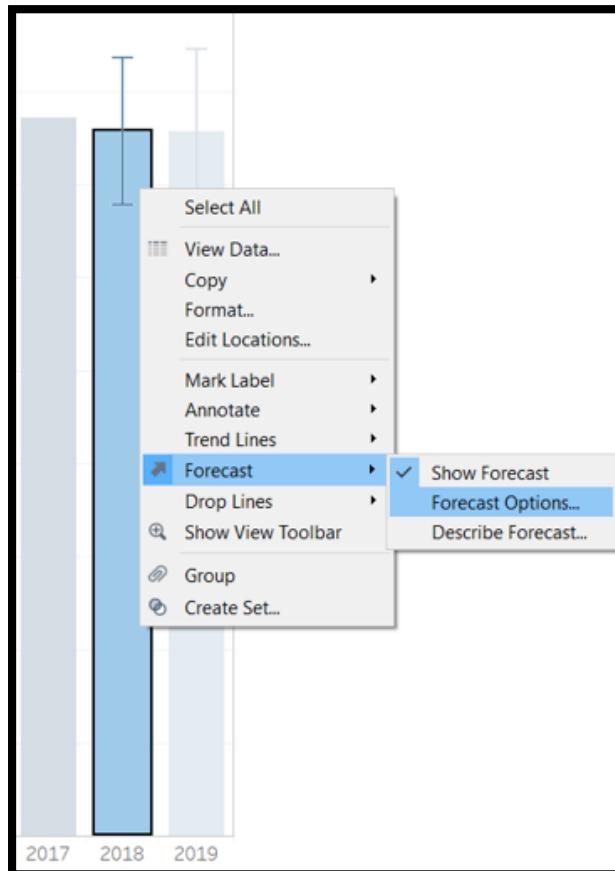


- **Exponential smoothing** that is **Quantitative forecasting** method is followed in tableau
- This method basically takes average of two variables for prediction
- The result of a forecast can also become a field in the visualization created.
- Tableau takes a **time dimension** and a **measure** field to create a forecast.

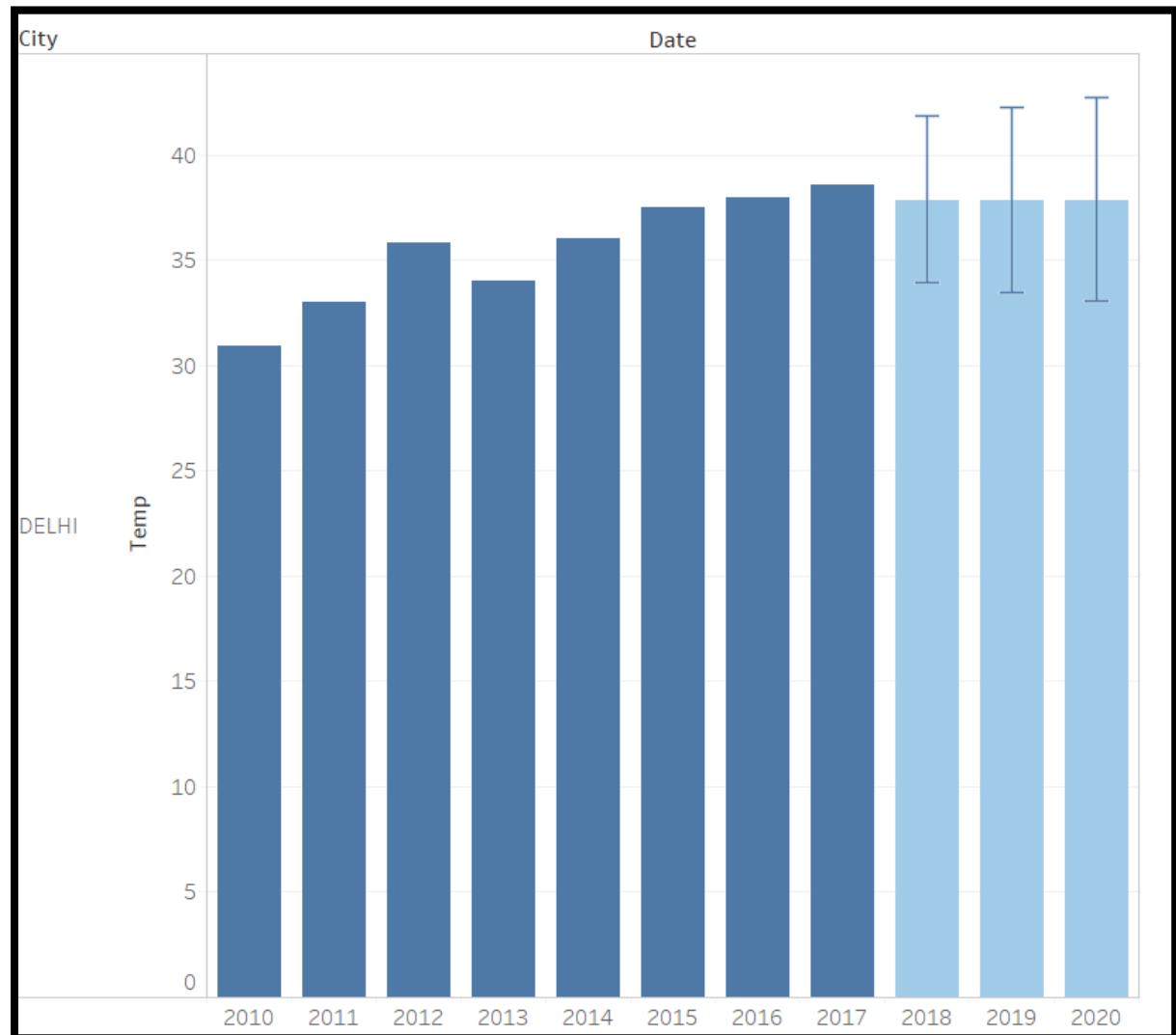
# Forecasting



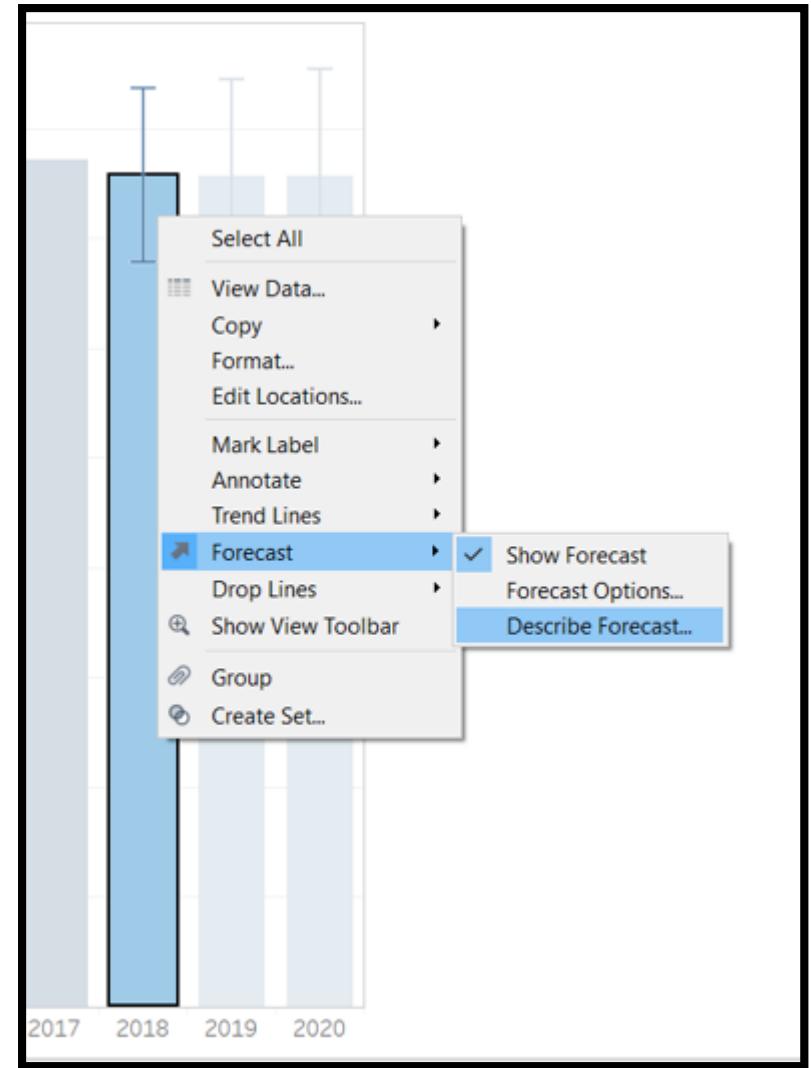
# Forecasting



# Forecasting



# Forecasting



# Forecasting

Describe Forecast

[Summary](#) [Models](#)

**Options Used to Create Forecasts**

Time series: Year of Date  
Measures: Sum of Temp  
Forecast forward: 2 years (2018 – 2019)  
Forecast based on: 2010 – 2017  
Ignore last: 1 year (2018)  
Seasonal pattern: None (Search for a seasonal pattern in yearly data is not supported)

**Sum of Temp**

Row City	Initial 2018	Change From Initial 2018 – 2019	Seasonal Effect	Contribution	Quality
			High	Low	Trend Season
DELHI	37.868 ± 3.934	0.000	None	0.0% 0.0%	Poor

Show values as percentages

[Copy to Clipboard](#) [Learn more about the forecast summary](#) [Close](#)

# Forecasting

Describe Forecast

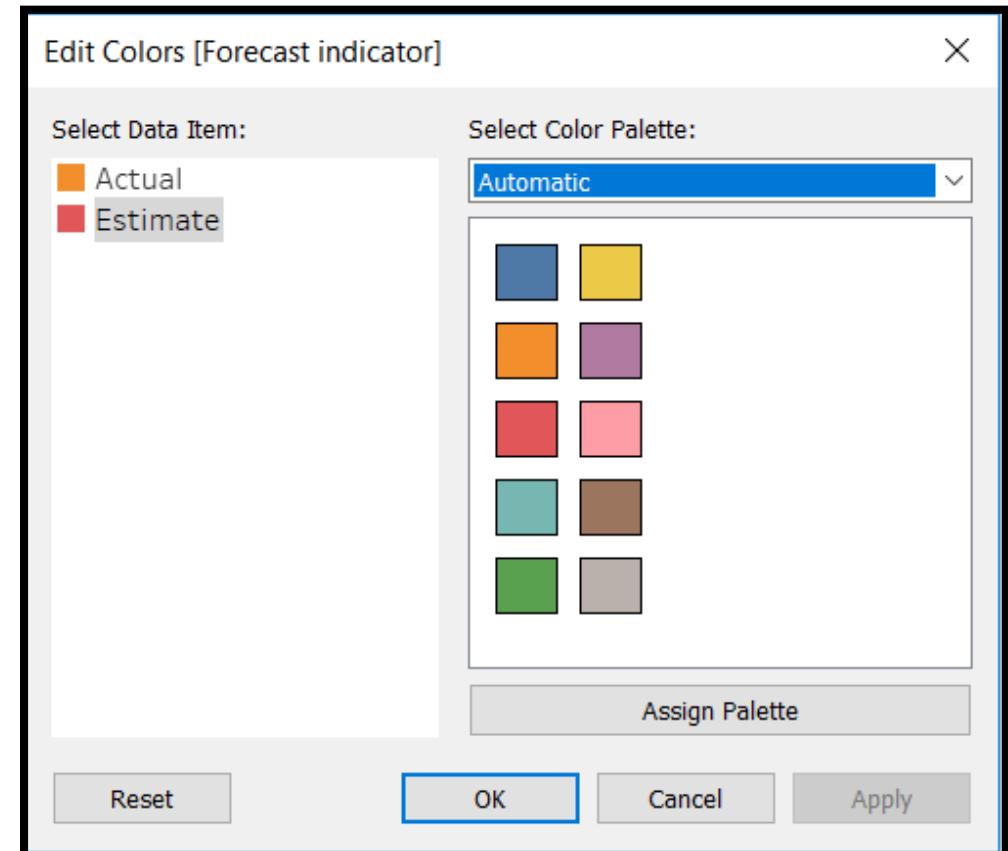
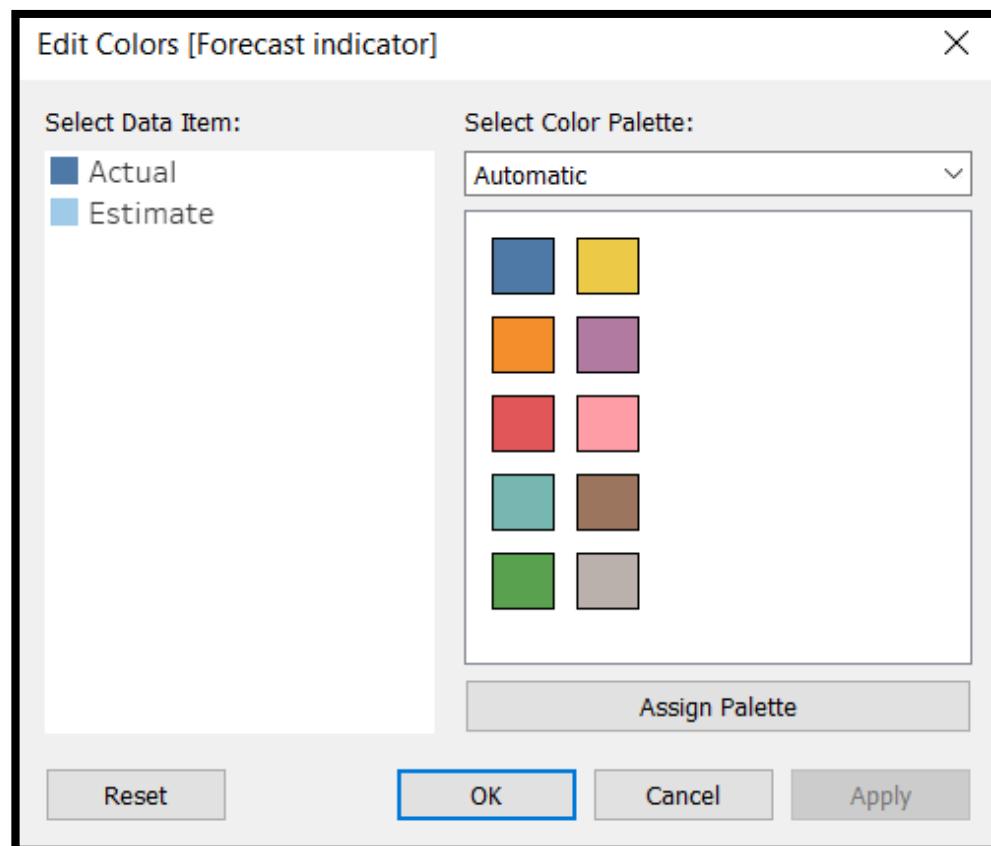
All forecasts were computed using exponential smoothing.

**Sum of Temp**

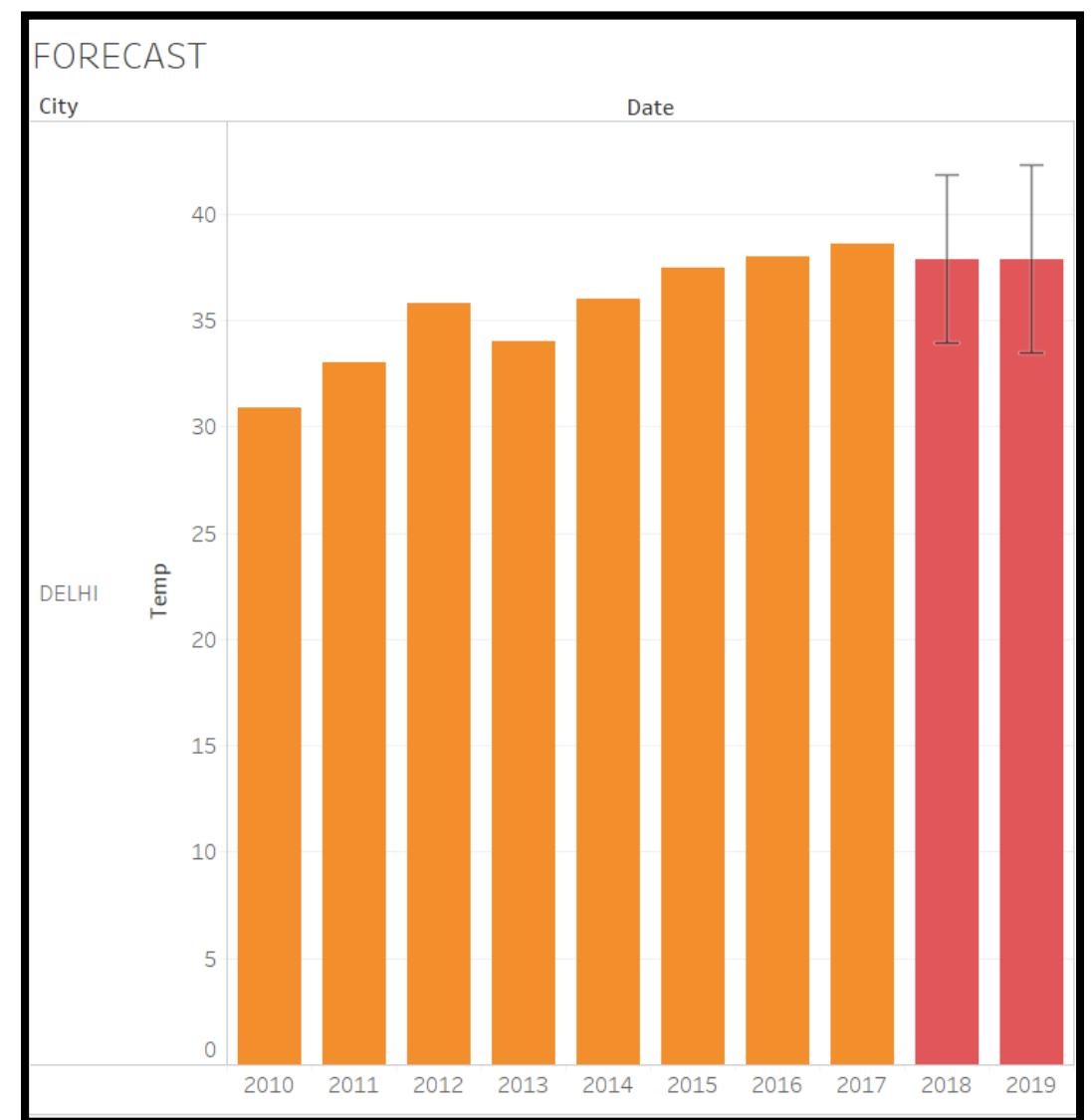
Row City	Model			Quality Metrics					Smoothing Coefficients		
	Level	Trend	Season	RMSE	MAE	MASE	MAPE	AIC	Alpha	Beta	Gamma
DELHI	Additive	None	None	2.007	1.790	1.11	5.1%	17	0.500	0.000	0.000

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# Forecasting

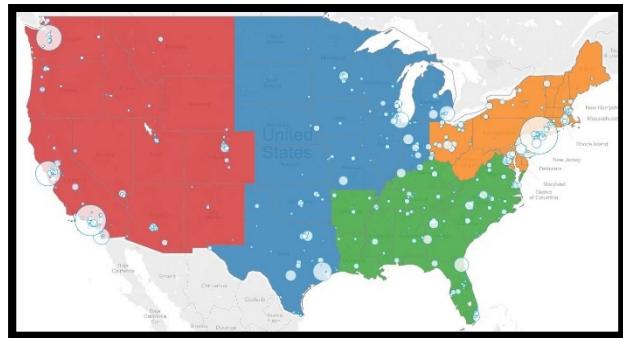


# Forecasting



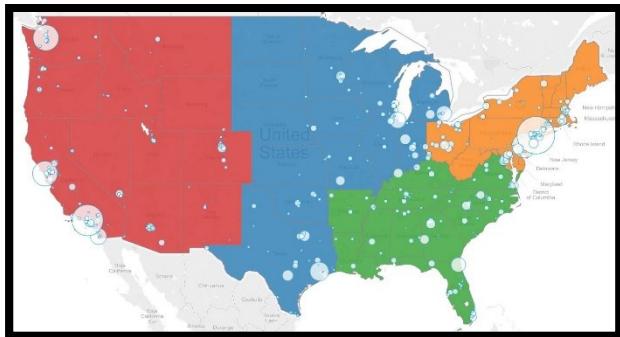
# Tableau : Mapping

# Mapping : To Analyze Geographical Data



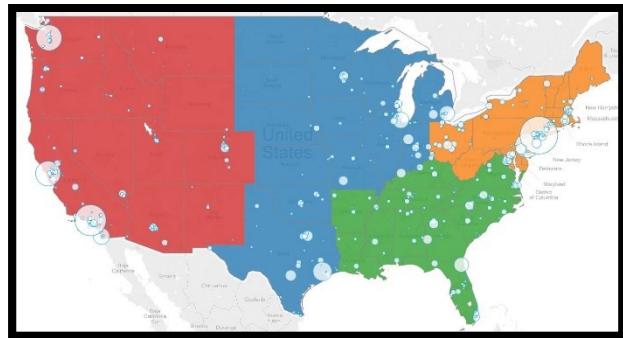
- A **map** view with one data point can be Created in tableau.
- A geographic role is assigned to Country (Cities or States)
- **Tableau** creates a **map** view for geographical roles.

# Mapping : Benefits



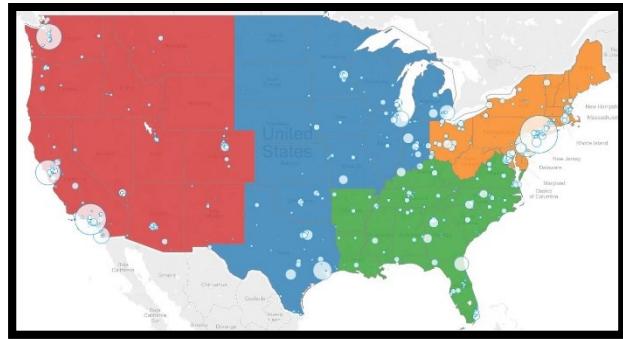
- Best Way to show Geographical Locations
- Easy Comparison of Quantitative data in different locations
- To highlight particular locations
- To Show a trend for visual cluster of data

# Mapping : Different types of maps in tableau



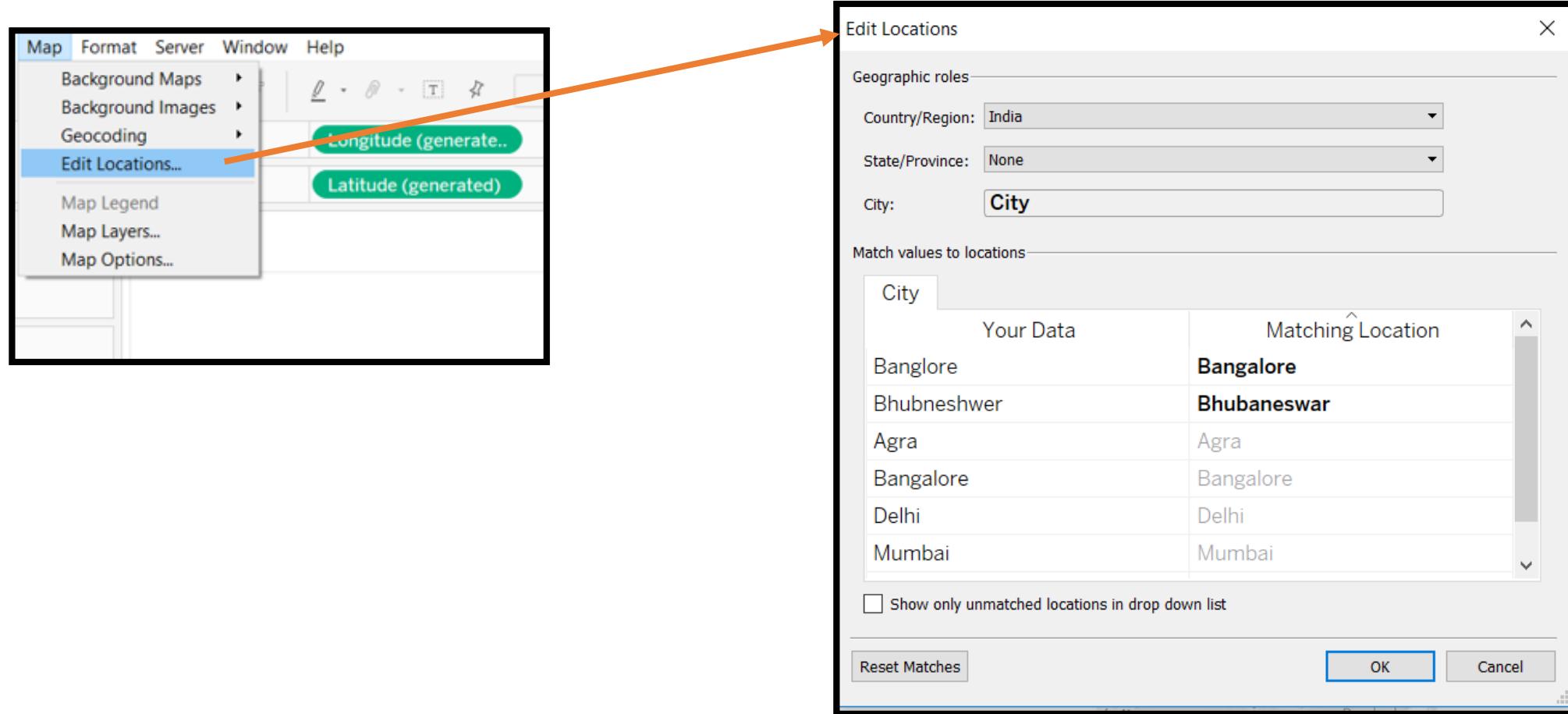
- Point distribution Maps
- Spider Maps
- Flow Maps
- Filled maps

# Mapping

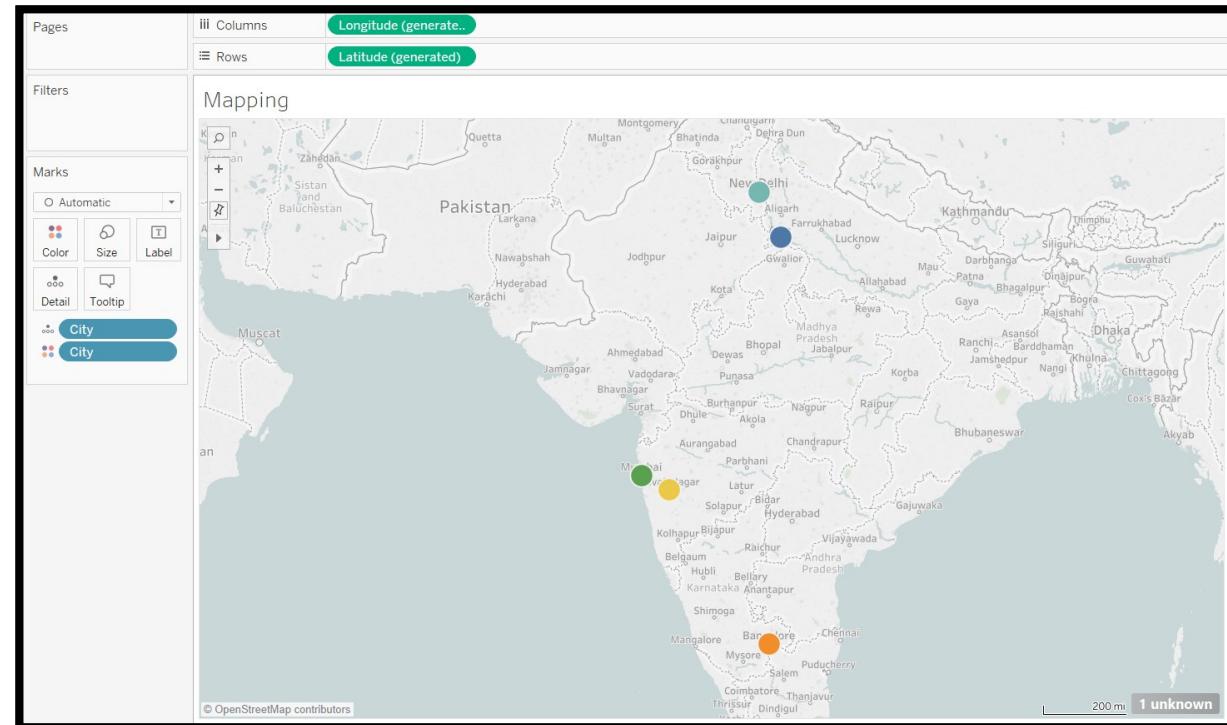
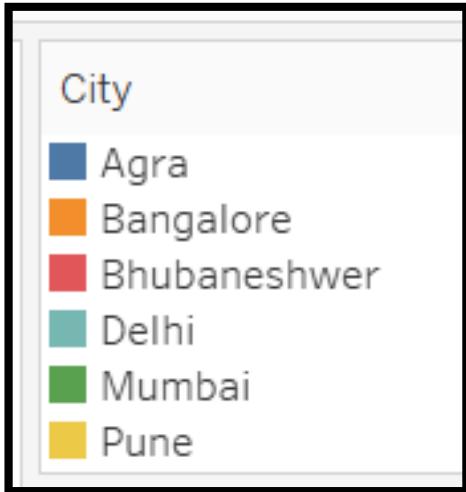


Lets See how we can create  
**Maps** in Tableau

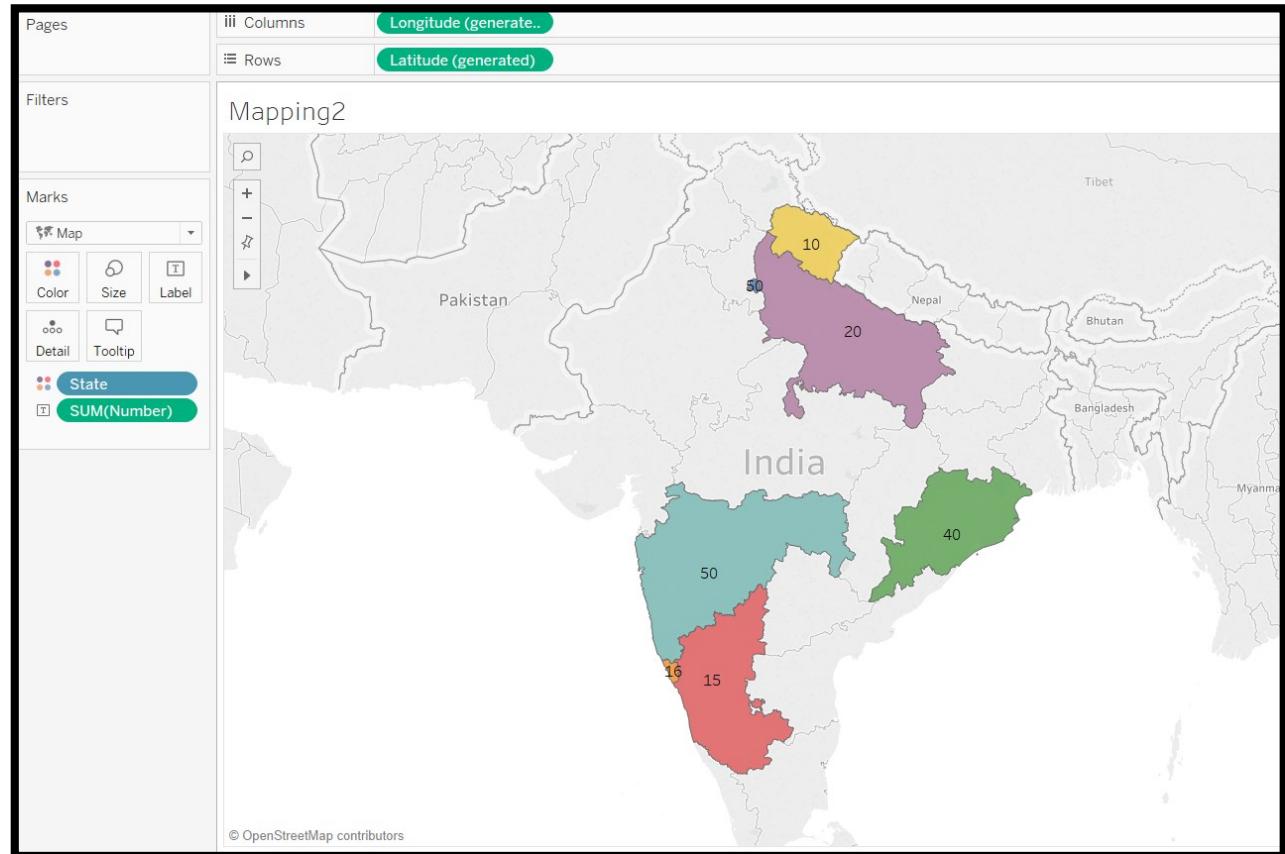
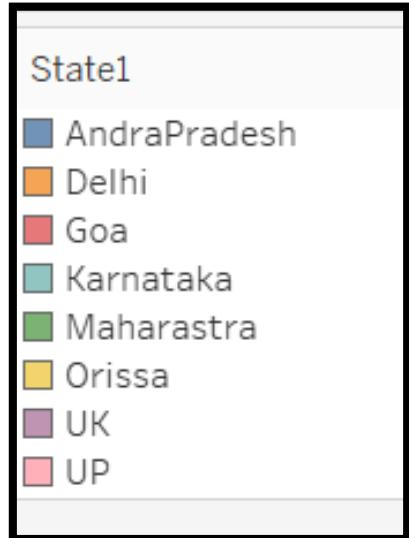
# Mapping : Editing Location



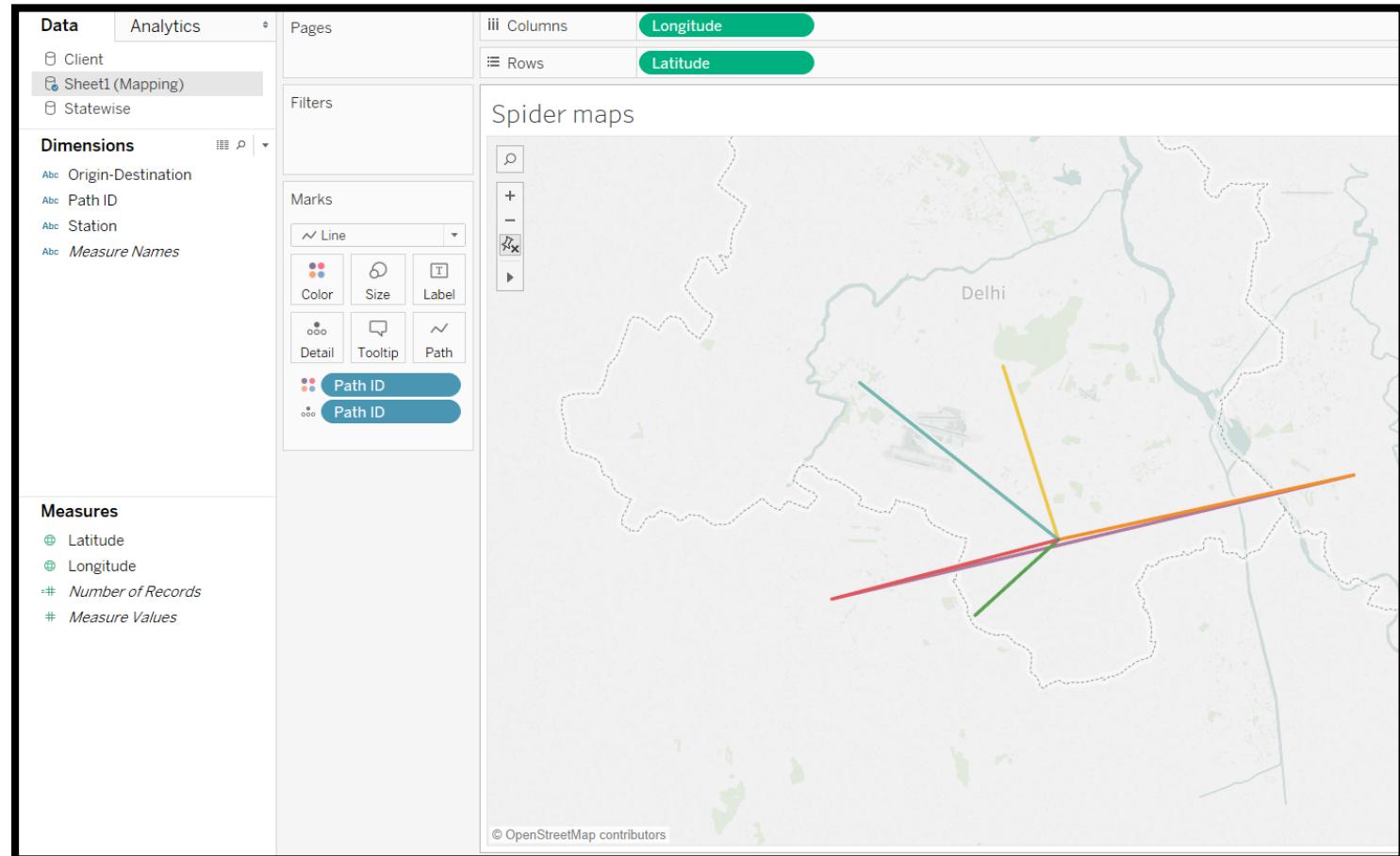
# Mapping : Point Maps



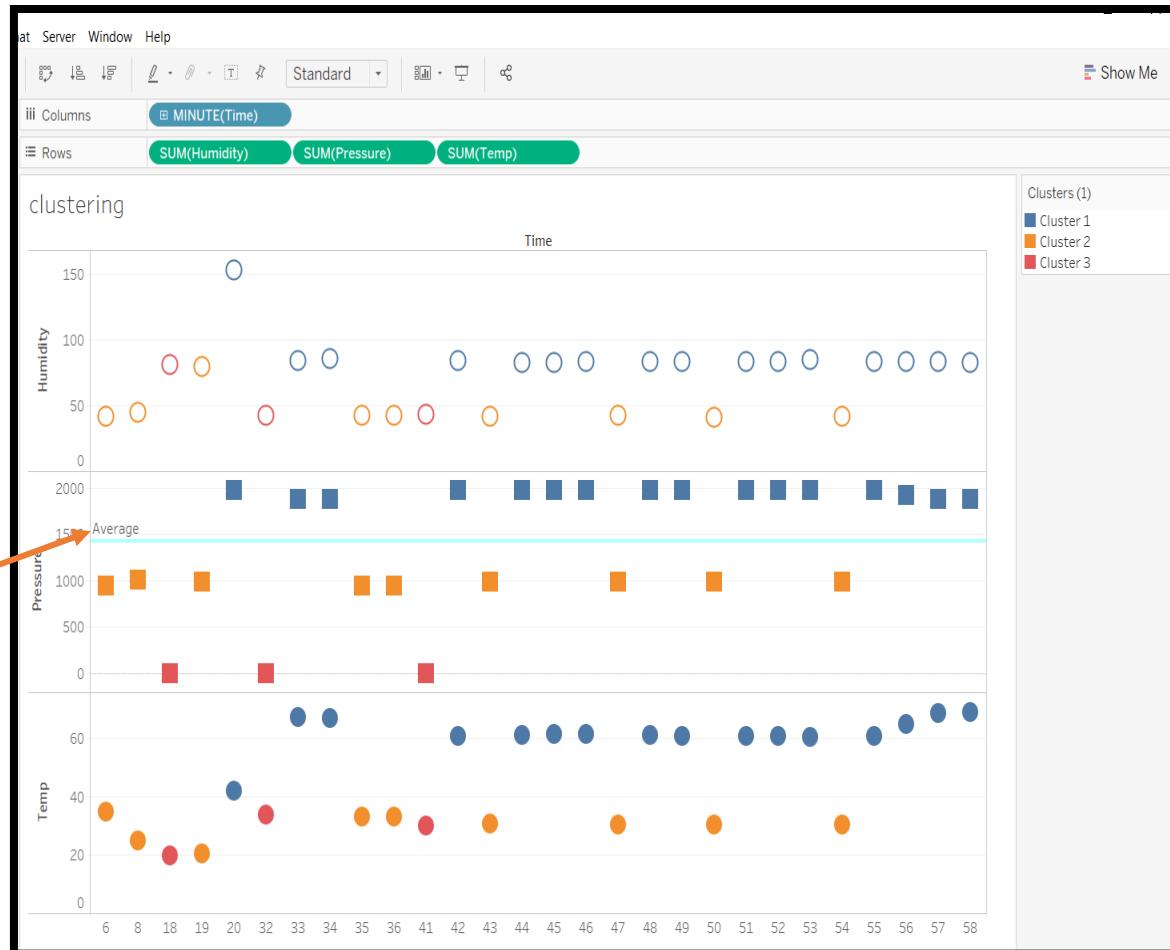
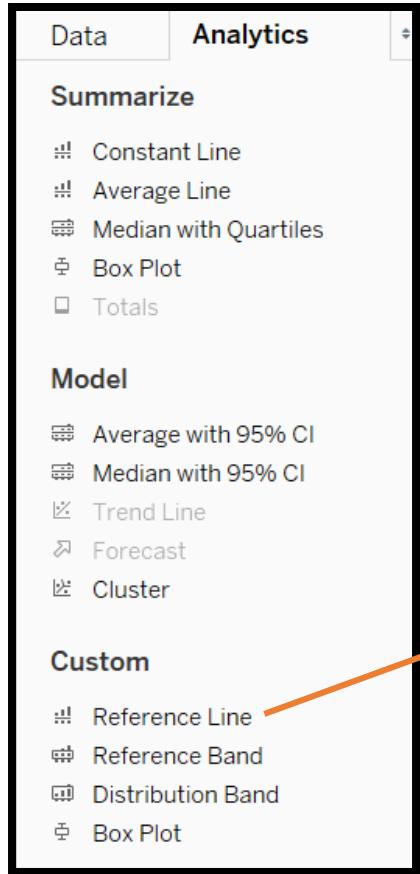
# Mapping : Filled Maps



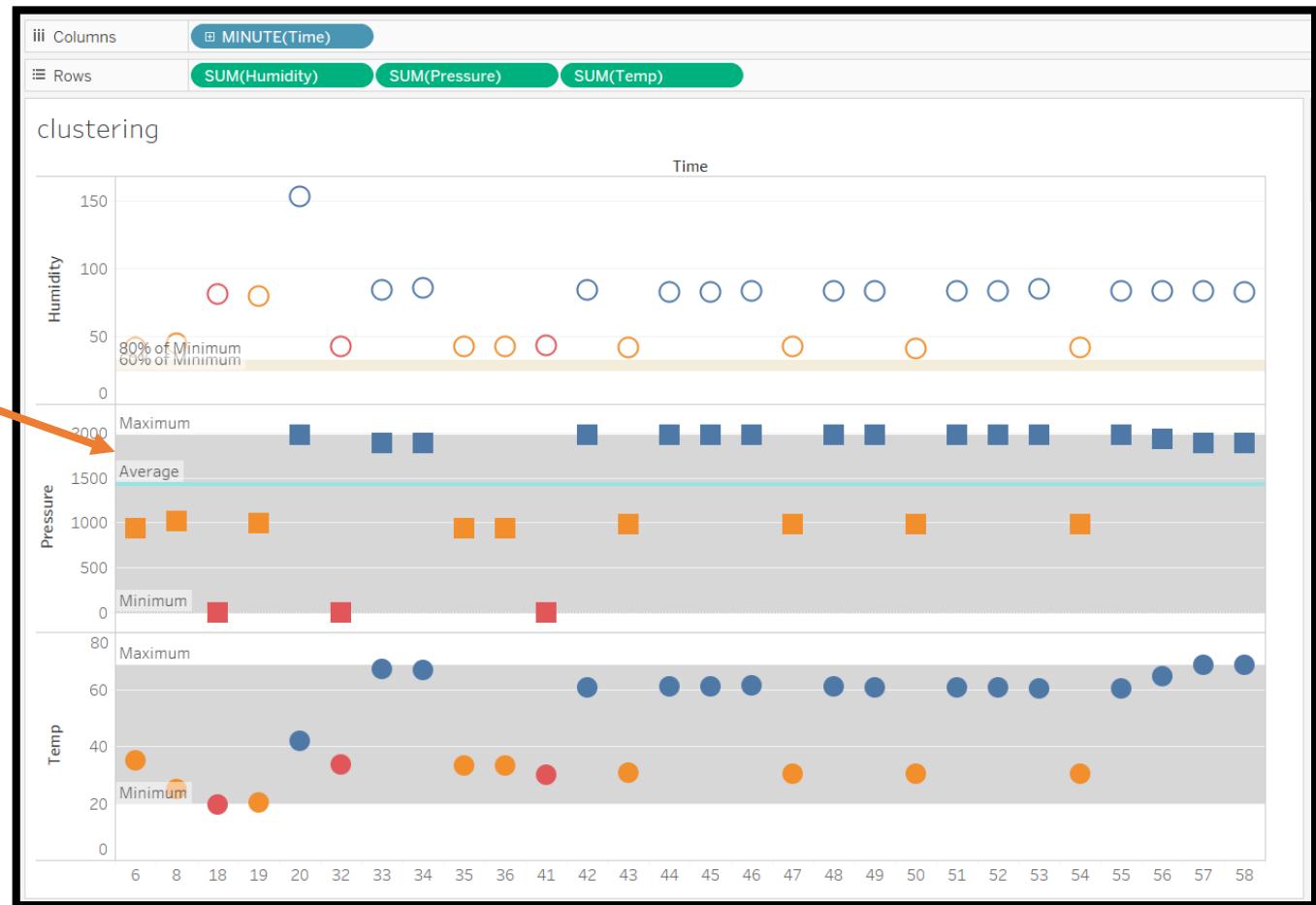
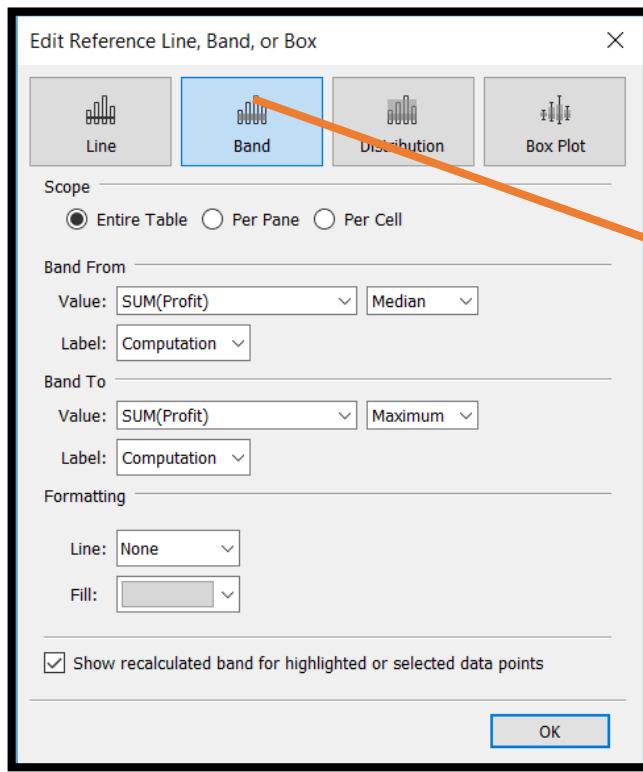
# Mapping : Spider Maps



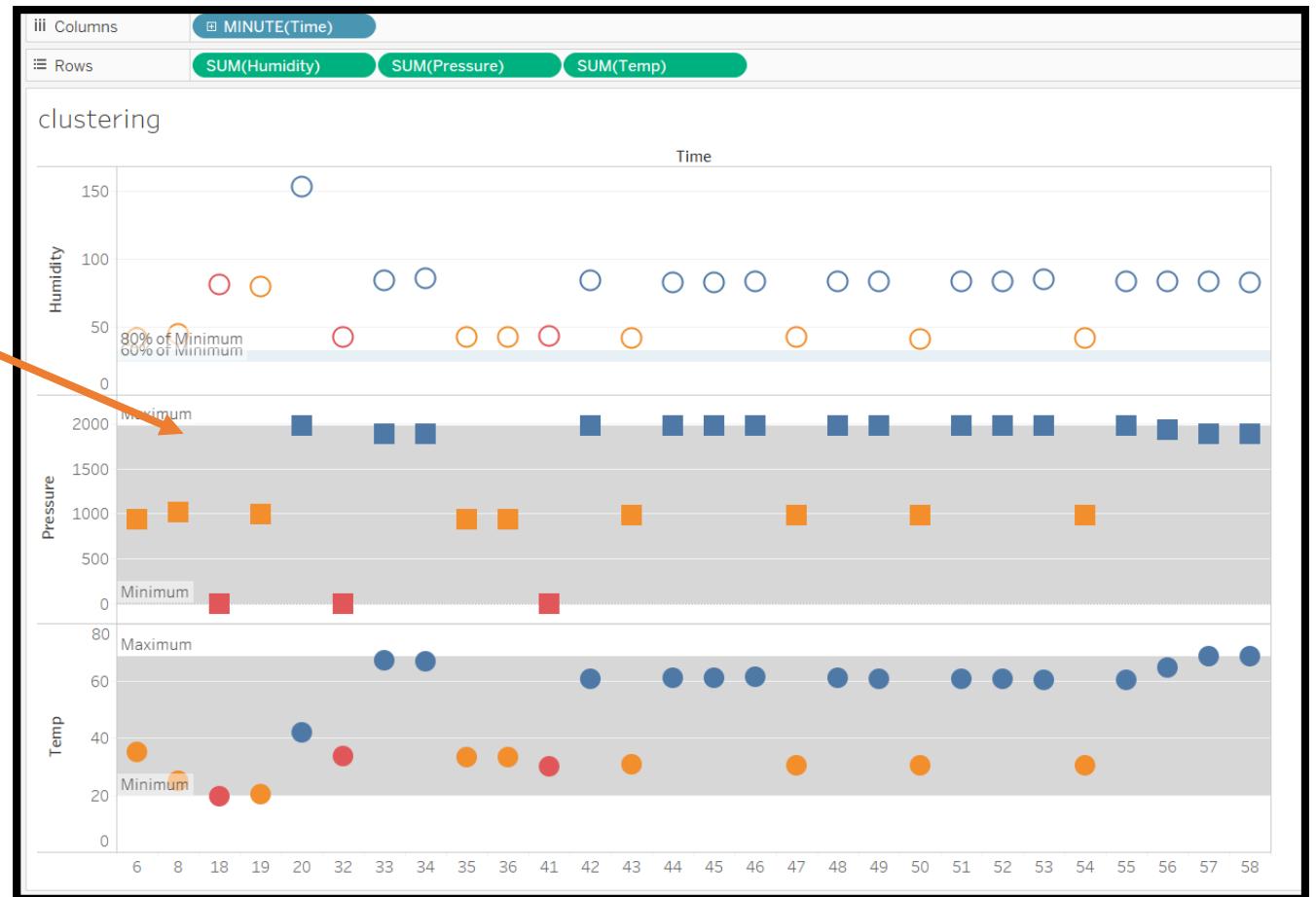
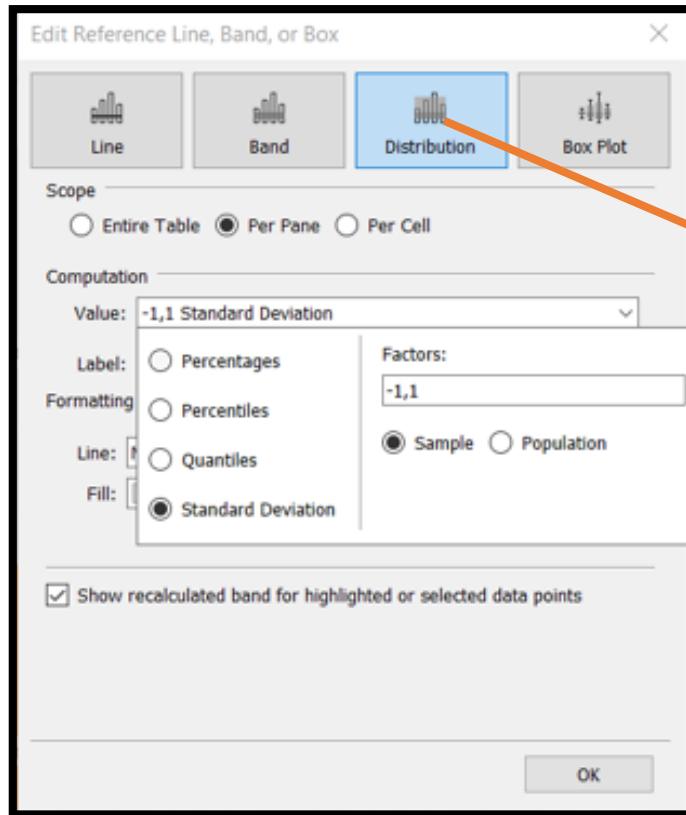
# Reference lines



# Reference lines



# Reference lines



# Reference lines

