

A Waterfall Chart and a Slopegraph.

Sleeper Ch. 37, 38

How to Make a Waterfall Chart.

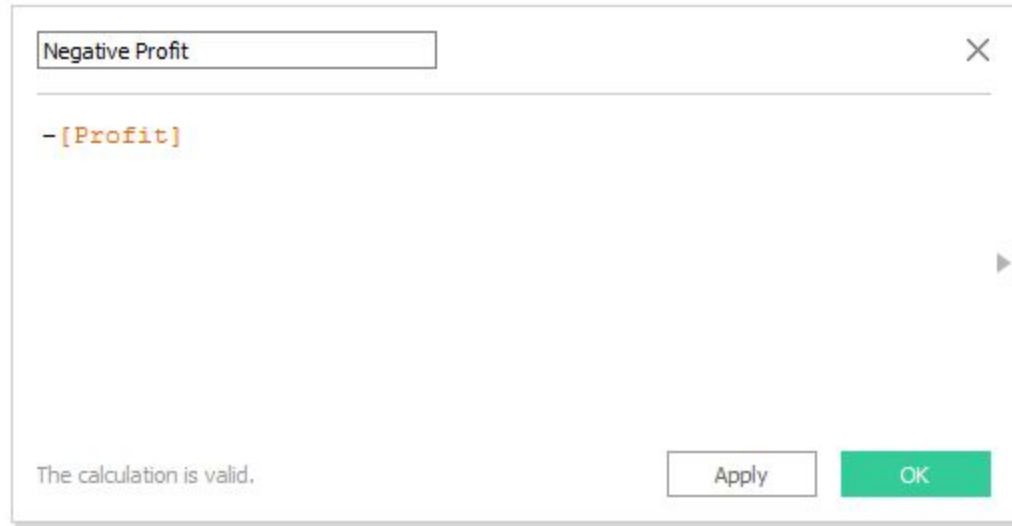
Start by building a bar chart:

- Columns: Sub-Category
- Rows: Sum(Profit)

Update Sum(Profit) pill into a **Running Total** Quick Table Calculation (table across).

- Mark Type: Gantt Bar

Create a New Calculated Field



Negative Profit

-[Profit]

The calculation is valid.

Apply OK

- Size Marks Card: **Sum(Negative Profit)**

Add Color Encoding and the Totals Bar

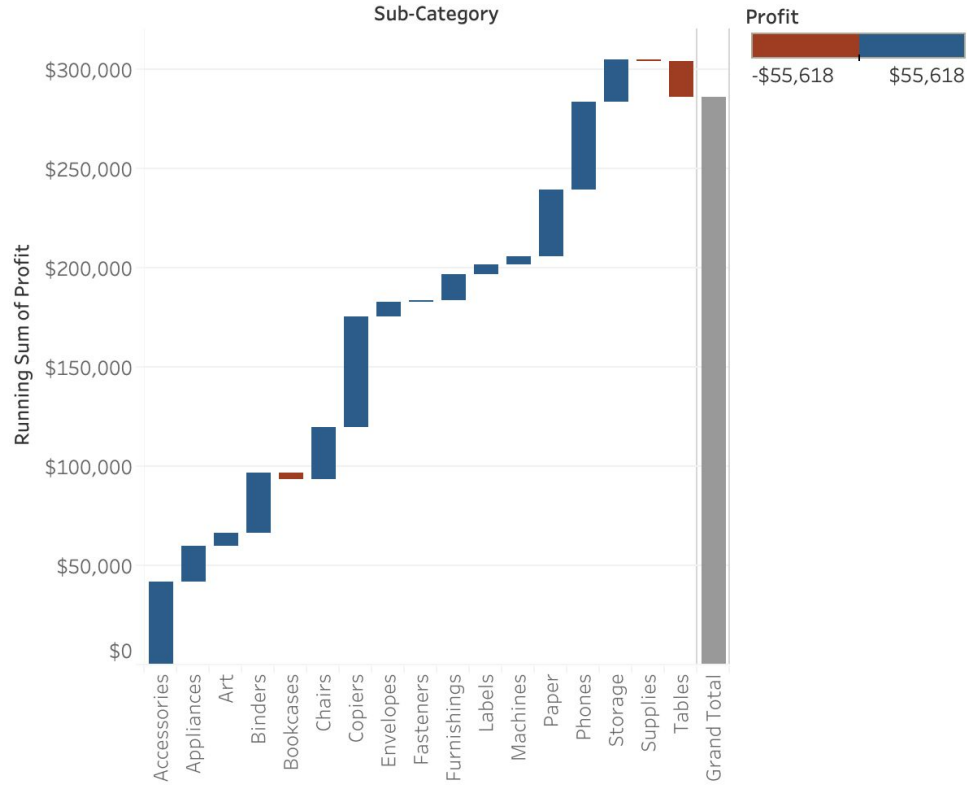
Add color encoding:

- Color Marks Card: `Sum(Profit)`
- Click on the **Color** Marks Card > **Edit Colors** > **Stepped Color: 2 Steps**

Add the totals bar:

- **Analysis** > **Totals** > **Show Row Grand Totals**

Waterfall Chart



Running Sum of Profit for each Sub-Category. Color shows sum of Profit. Size shows sum of Negative Profit.

A **Slopegraph** is essentially a line chart between two points. Works well to show a comparison between two states.

How to Create a Slopegraph.

Create a bar chart with your two-point time comparison:

- Columns: Year
- Rows: Sum(Measure)

Add dimension that you are looking to compare to the Level of Detail:

- Details Marks Card: Category

Change the Mark Type:

- Marks Type: Line

Format the Lines.

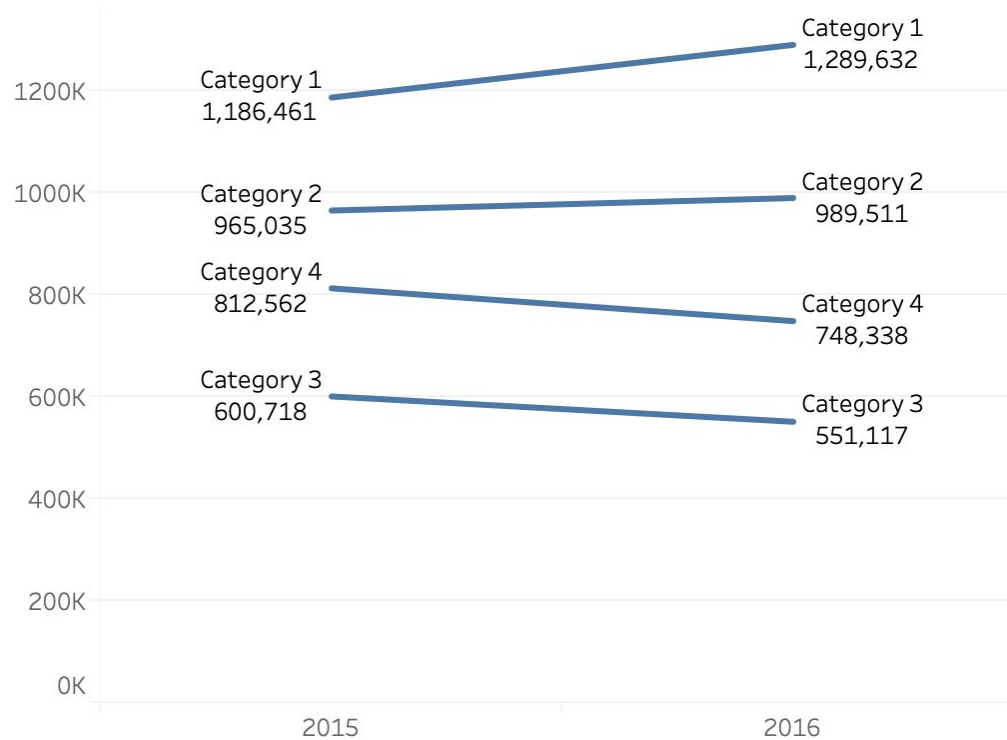
Add Labels:

- Label Marks Card: **Category**, **Sum(Measure)**

In order to show labels at both ends, click on the **Label** Marks Card and select the **Line Ends** option.

Update to the **Entire View** the **Standard** DropDownBox.

A Slopegraph



The trend of sum of Measure for Year. The marks are labeled by Category and sum of Measure. Details are shown for Category.

Our Data Source for the Dual-Axis Slope Graph

	A	B	C
1	Company	Social Network	Size of Audience
2	Our Awesome Company	Facebook	1289632
3	Top Competitor	Facebook	1186461
4	Our Awesome Company	Twitter	989511
5	Top Competitor	Twitter	965035
6	Our Awesome Company	LinkedIn	551117
7	Top Competitor	LinkedIn	600718
8	Our Awesome Company	Instagram	748338
9	Top Competitor	Instagram	812562

How to Create a Dual-Axis Slopegraph.

Start with a bar chart; each column represents a dimension we are comparing:

- Columns: Social Network, Company
- Rows: Sum(Size of Audience)

Change the Mark Type:

- Marks Type: Line

Add marks to line ends:

- Click on the **Color** Marks Card and choose **Markers: All**

Configure Your Second Axis and the Order of Companies.

Add a second axis by dragging the **Size of Audience** measure to its position all the way to the right of the viz.

Right-click the second axis and select **Synchronize Axis**.

If there's a need to change the order of 'Competitor' vs 'Our Company', right-click the **Company** pill on the Columns shelf > **Sort** > Asc vs Desc

Configure the Circle Marks

For the second set of marks:

- Marks Type: Circle
- Label Marks Card: **Sum(Size of Audience)** > Right-Click > **Quick Table Calculation** > **Percent Difference; Compute Using** > **Pane (across)**
- Color Marks Card: **Company**

Right-click **Label** Marks Card > **Border**: Blue; **Font**: White & **Bold**, **Alignment**: **Vertical: Middle**

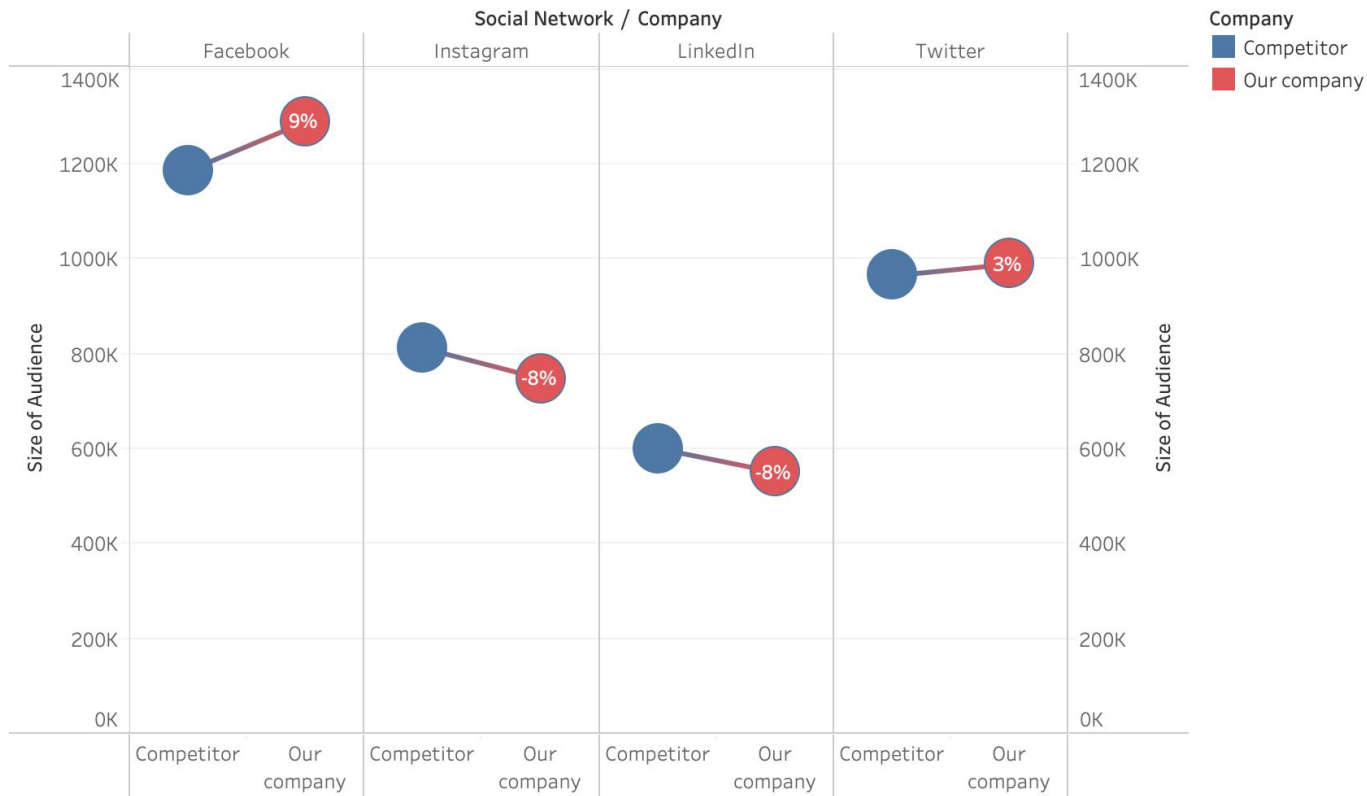
Right-click the Circle Mark > **Format...** > **Fields** down arrow > **% Difference in SUM(Size of Audience)** > **Default Numbers: Percentage, Decimal places: 1**

Configure the Slope Marks

Select the first set of Marks Cards for the Slope:

- Color Marks Card: **Company**

A Dual-Axis Slopegraph



The trends of sum of Size of Audience and sum of Size of Audience for Company broken down by Social Network. Color shows details about Company. For pane Sum of Size of Audience (2): The marks are labeled by % Difference in Size of Audience.