Thank you so much for choosing to attend this workshop. The objective here is to get you started with some of the key concepts and techniques you'll need to begin creating interactive visualizations in Tableau.

- In this workshop we'll be looking at:
- The importance of Data Visualization
- Misleading Graphs (with real life examples)
- Introducing different data visualization tools
- Creating interactive visualizations in Tableau

There's a lot of information to cover in our session, so please put your phone or tablet in silent mode and feel free to ask your questions after the workshop.

Here's some social media information:

- Twitter & Instagram: @alexucimartinez
- Website: public.tableau.com/profile/alexandre.martinez
- Website: tinakorani.com

What is Data Visualization?

DATA VISUALIZATION IS A GENERAL TERM THAT DESCRIBES ANY EFFORT TO HELP PEOPLE UNDERSTAND THE SIGNIFICANCE OF DATA BY PLACING IT IN A VISUAL CONTEXT.

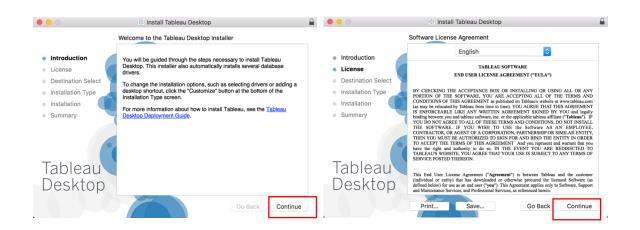
Data Visualization Tools

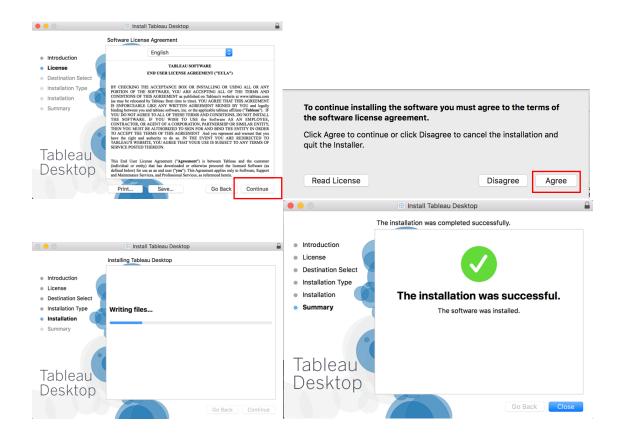
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Misleading Graphs Realtime Examples: https://www.statisticshowto.datasciencecentral.com/misleading-graphs/

Tableau Installation

1. Download Tableau at https://www.tableau.com/products/desktop/download





Import Dataset from Excel .csv file

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To a Server Tableau Server Microsoft SQL Server MySQL Oracle Amazon Redshift More > Saved Data Sources Sample - Superstore World Indicators	Sample Workbooks	Regional	World Indicators	More Samples	Viz of the Week Explore viz of the week Contrained the week Resources Don't miss the data conference of the year. Register for TC18 Get Tableau Prep Blog - Tableau launches top business intelligence trends for 2019 Forums

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The tab "Data Source" shows the data imported. We can double check that the importation didn't alter the data or change its format.

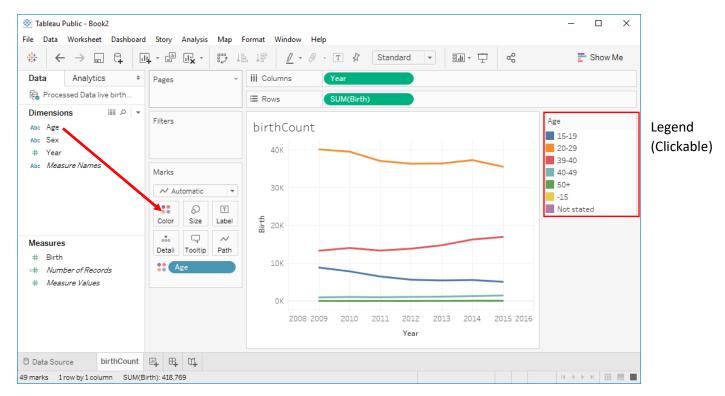
2. Click on sheet to create a graph and rename the tab "birthCount". On the Worksheet, we can see the dimensions (Tableau assigns the data that are categorical into the Dimensions area) and the Measures (Tableau assigns the other data into the Measures area).

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3. Now we can to create a graph of birth count over time. Drop the dimension Year on the column and the measure birth on the row.

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4. Now we want to have a graph for each age category: Drop the Age dimension into the color Marks.



- 5. Now we can to calculate the percentage change from 2009. We start by duplicating the tab to work on it and rename it to prctChange09.
- 6. On this tab, we want to create a calculated table. Click on Birth and then "Add Table Calculation".

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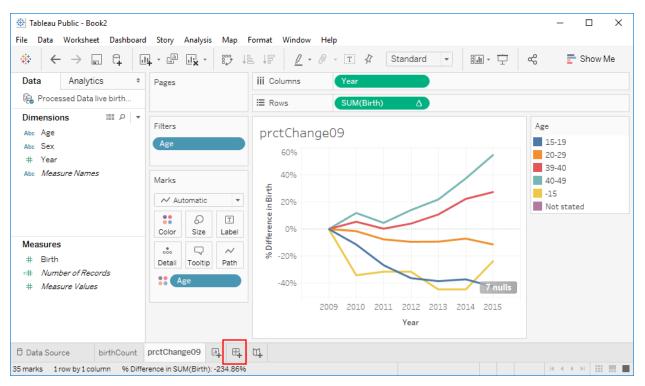
- 7. Now we can calculate the percentage change from 2009. Select:
 - a. "Percent Difference From" as Calculation Type
 - b. "Specific Dimensions" as Compute Using
 - c. Year
 - d. "First" as relative to

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8. Now we have the final graph. The category 50+ has much higher values (300% change) than the other so we can't see the details of the other curves. We can right-click on 50+ in the legend area and exclude the 50+. Because there are few births in the 50+ category, the percentage change is higher. Imagine if you earn \$1000 and you have a salary raise of \$2000, it's 200% increase. But if you earn \$10,000 and you have the same salary raise, it's an increase of only 20%.

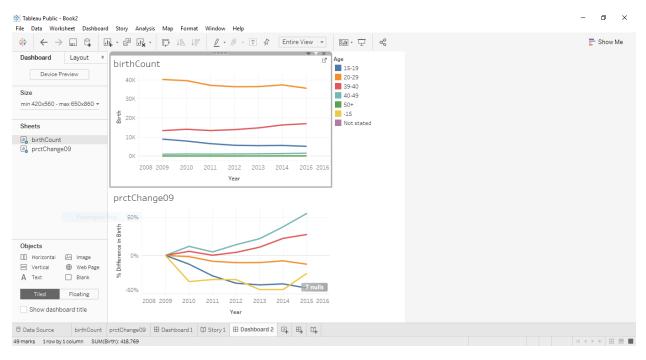
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9. After the exclusion of 50+, we should have the following graph:



10. Now we can combine the two plots into the dashboard. Click on new dashboard.

On the dashboard, you can drag and drop the two worksheets just created to have them on only one page.



11. You can also add a story. Click on new story and double-click on each worksheet that you want to add to the story.