

Introduction to Tableau

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Overview

- ❖ Download & Install Tableau
- ❖ Introduction
- ❖ Prepare data to transform to a visual
- ❖ Work with Tableau
 - Intro to Tableau Interface
 - Connecting to data
- ❖ Create the visual
 - Overview of a worksheet
 - Create worksheets
- ❖ Create an interactive dashboard
- ❖ Save/Publish
- ❖ Additional Resources



Step 1: Download & Install Tableau

Everyone can download Tableau Public for free from
<https://public.tableau.com/en-us/s/download>

Once it's installed, go to **<https://public.tableau.com/s/>** to sign up for an account/profile.

Tableau Academic Program: **<https://www.tableau.com/academic>**

The student/Instructor license expires after one year; you can request a new license each year as a full-time student.

What is Tableau?

An interactive data visualization software that allows you to tell a story about your data.

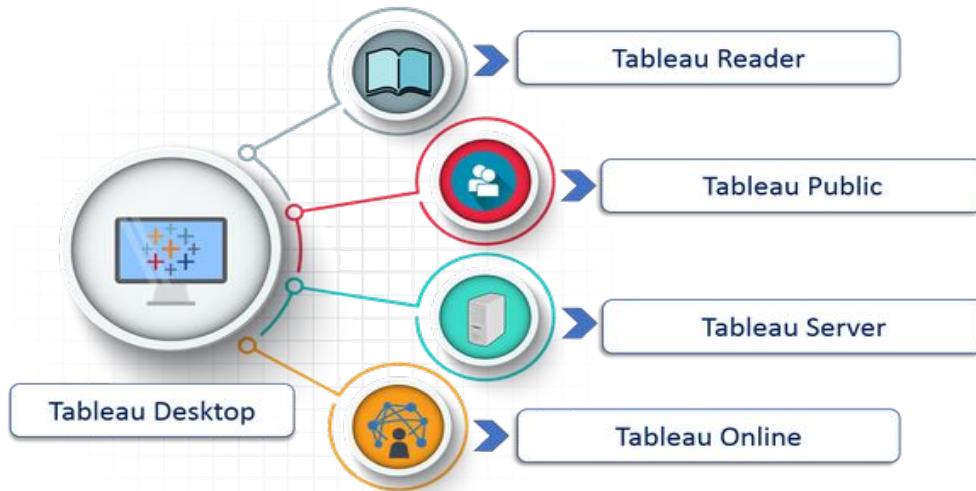


Tableau Family

Tableau offers five main products which are:

<https://www.tableau.com/products>

Developer Tools

- ❖ **Tableau Desktop**
- ❖ **Tableau Public**

Sharing Tools

- ❖ **Tableau Server:** Collaboration in organizations
- ❖ **Tableau Reader:** Let you read files saved in Tableau Desktop
- ❖ **Tableau Online:** Similar to Tableau Server (On Cloud)

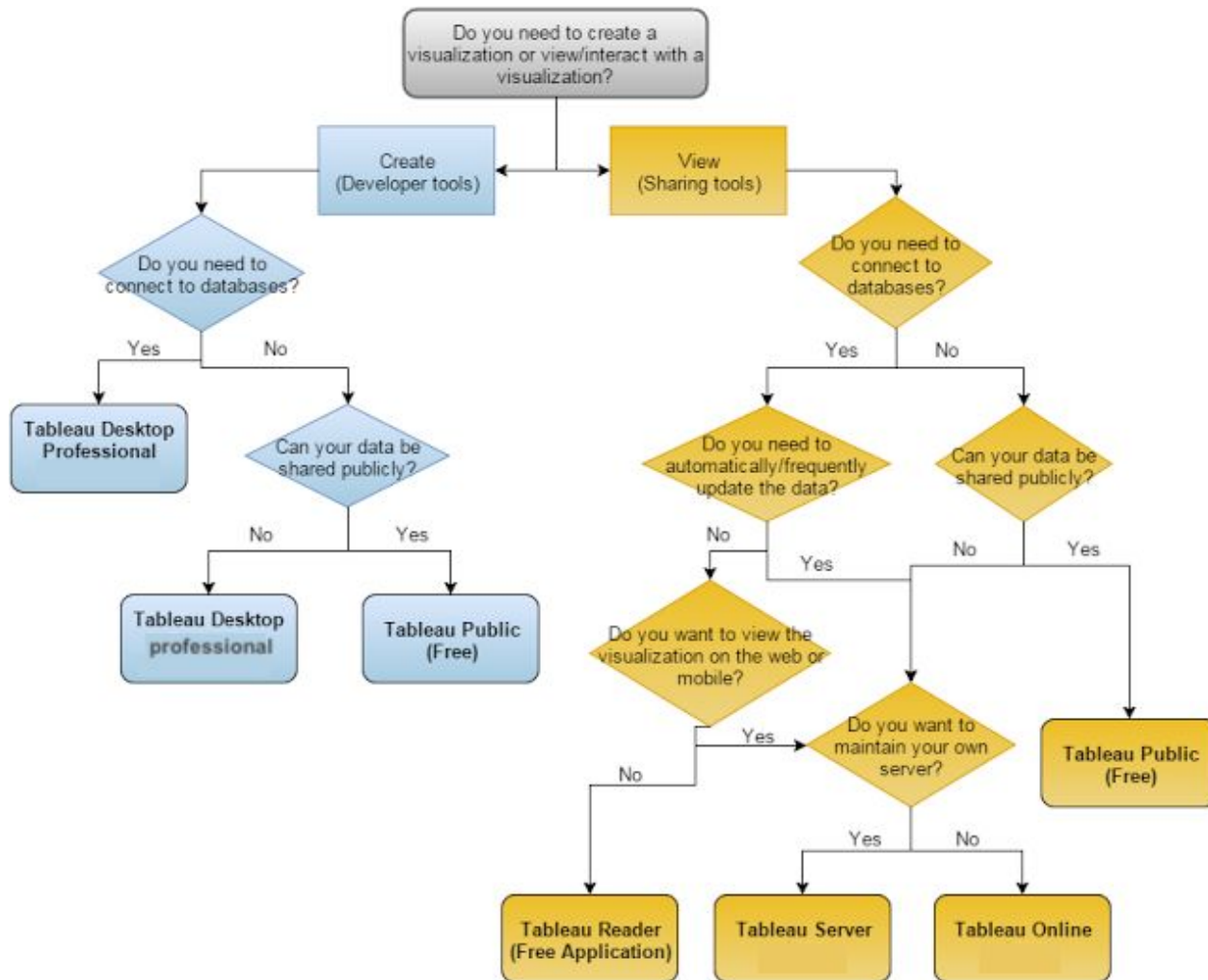


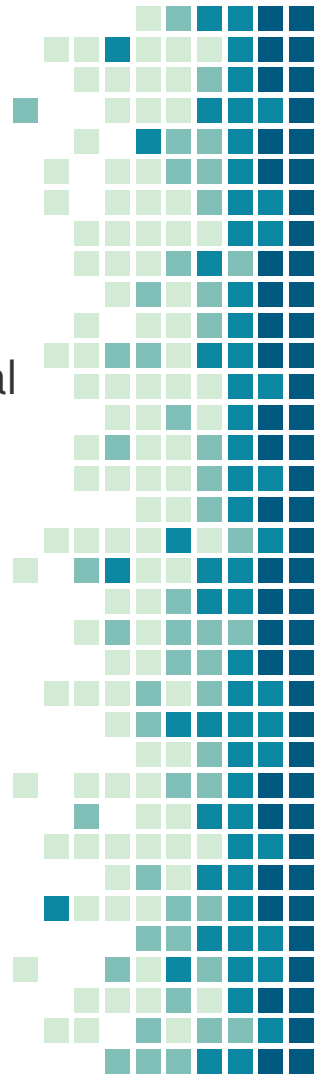
Tableau file types:

❖ **Tableau Workbook (.twb)**

It relies on a live data source connection and doesn't contain the actual data within the workbook file.

❖ **Tableau Packaged Workbook (.twbx)**

It contains both the Tableau workbooks and the data!



Workbooks are made up of:

- ❖ **Worksheet(s):**

Worksheets are where you create your visualization.

- ❖ **Dashboard(s):**

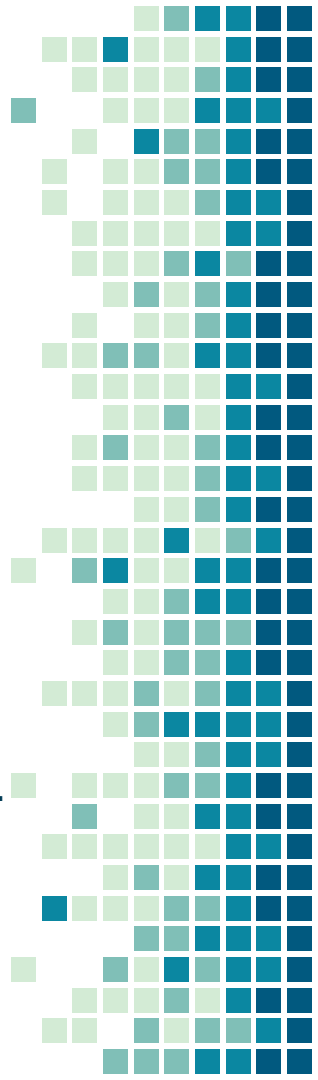
It is a canvas that displays one or more worksheets.

Example: [Visual Vocabulary](#) by Andy Kriebel

- ❖ **Story(s):**

Enables you to snapshot visualizations and step a user through a story.

Example: [Race to Alaska](#) by Anthony Gould



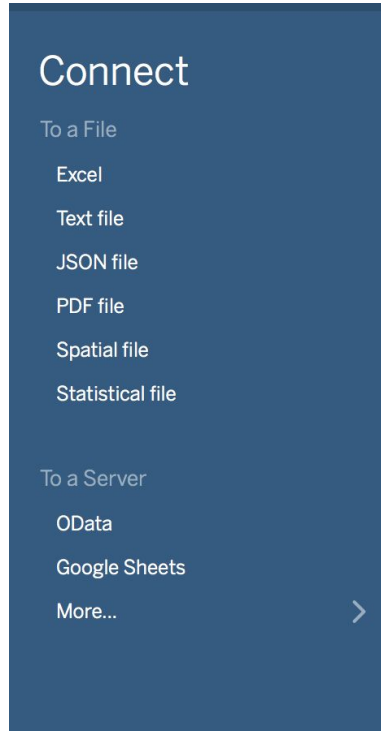
Step 2: Getting Started with Tableau

- ❖ The dataset we will use in this workshop can be downloaded from

<https://github.com/BCDigSchol/coffee-code>

2017 Boston Marathon Runner Statistics

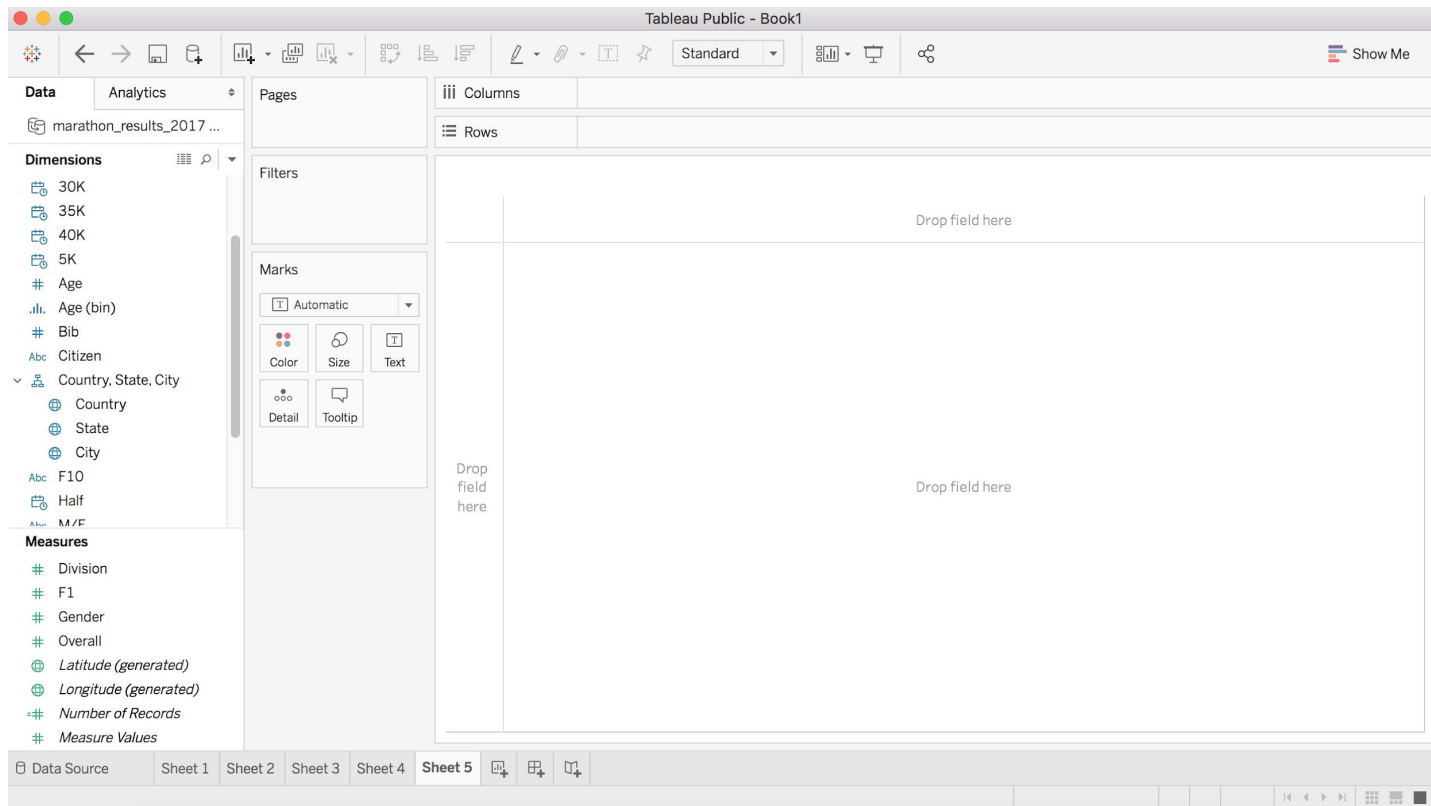
Step 3: Connecting With Data



To connect to an excel file, click “Excel” on the left hand side. Navigate to the file on your computer and double click to open it.



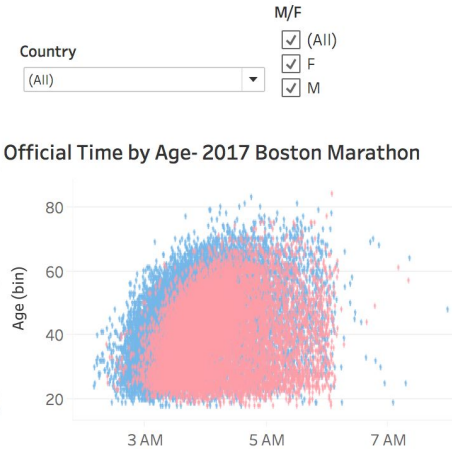
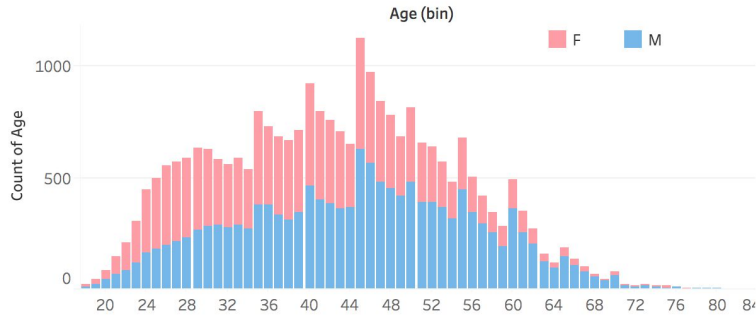
Step 4: Tableau Workbook Interface



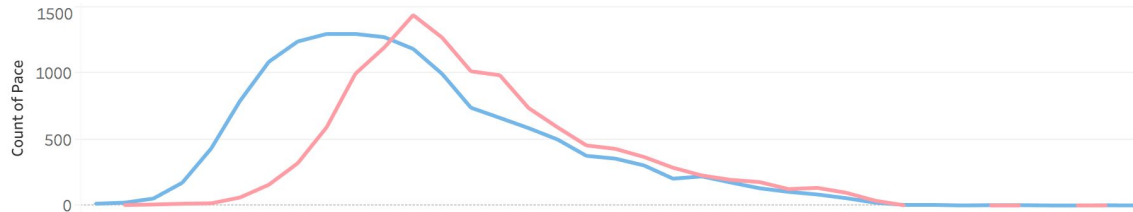
Step 6: Create an interactive dashboard

2017 Boston Marathon Results Analysis

2017 Boston Marathon Runners by Age & Gender



Pace by Gender



Step 7: Save and Publish

The screenshot shows the Tableau Desktop interface. The 'Server' menu is open, highlighting 'Publish Workbook...'. The dashboard, titled '2017 Boston Marathon Results', contains three visualizations:

- 2017 Boston Marathon Runners by Age:** A bar chart showing the count of runners by age bin (20-84) for females (F, red) and males (M, blue). The y-axis is 'Count of Age' (0-1000).
- Official Time by Age- 2017 Boston Marathon:** A scatter plot showing age (bin) on the y-axis (20-80) against time on the x-axis (3 AM, 5 AM, 7 AM). Data points are colored by gender (F, red; M, blue).
- Pace by Gender:** A line chart showing the count of pace for males (blue line) and females (red line) across different pace bins. The y-axis is 'Count of Pace' (0-1500).

The left sidebar shows the 'Sheets' list (Sheet 1 to Sheet 12) and the 'Objects' panel with options for layout (Horizontal, Vertical, Tiled, Floating) and a checkbox for 'Show dashboard title'.

Additional Resources

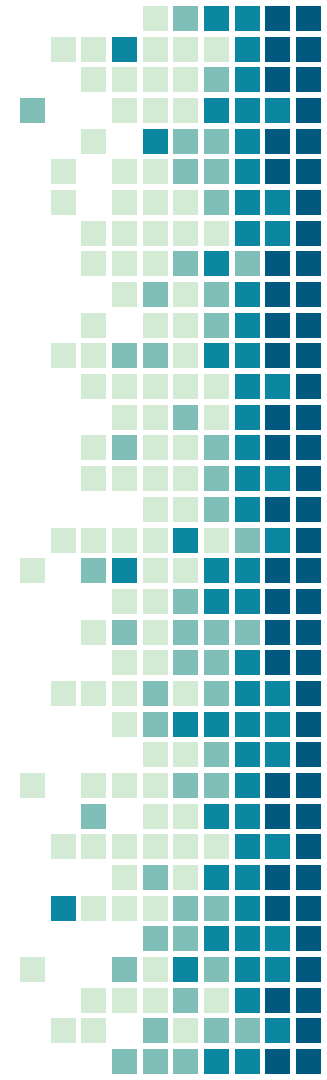
- [Tableau Community](#)

Join the Tableau Community Forums to find solutions for what you need to accomplish. Ask questions to receive help and feedback.

- [Tableau Visual Gallery](#)

Get inspired by the many interactive visualizations in the Visual Gallery. Download the workbooks to play with on Tableau Desktop

- [How-to Videos](#)
- [Lynda.com](#)



THANKS!

Any questions?