Criteria	Power BI	Tableau
Popularity (users)	5M	300K
Learning Curve	Easy to start, more complicated the more advanced you go	Difficult to start, easier the more advanced you go
Data Preparation	PowerQuery	Data Prep
Data Transformation	Database level	Visual level
Data Model	Star/Snowflake	Flat
Data Visualization	Similar to Office	Well-known for visuals
Price	$9.99 per user, per month	$35-70 per user, per month
Filters	Controlled by developer and end-user	Controlled by developer

Tableau Terminology

Dimensions

- In Power BI terms = *Dimensions*
- Qualitative data
    - Categories, descriptors, strings

Measures

- In Power BI terms = *Facts*
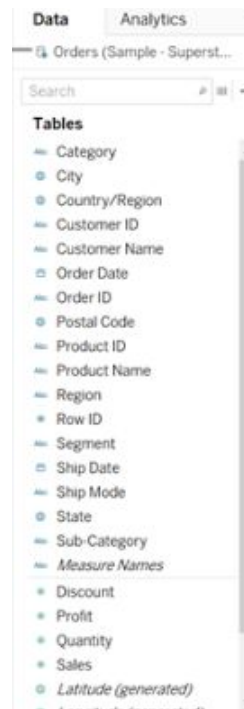- Quantitative data
    - Aggregations, values, integers

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Tableau Terminology

Workbook

Sheets

Dashboards

Stories

Table Calculations

Shelves & Cards

Workbooks & Sheets

The workbook is the Tableau file that contains sheets, dashboards, and stories.

A sheet is where you create individual visualizations of your data.

Workbooks and Sheets - Tableau

A. Workbook name. A workbook contains sheets. A sheet can be a worksheet, a dashboard, or a story. For more information, see Workbooks and Sheets.

B. Cards and shelves - Drag fields to the cards and shelves in the workspace to add data to your view.

C. Toolbar - Use the toolbar to access commands and analysis and navigation tools.

D. View - This is the canvas in the workspace where you create a visualization (also referred to as a "viz").

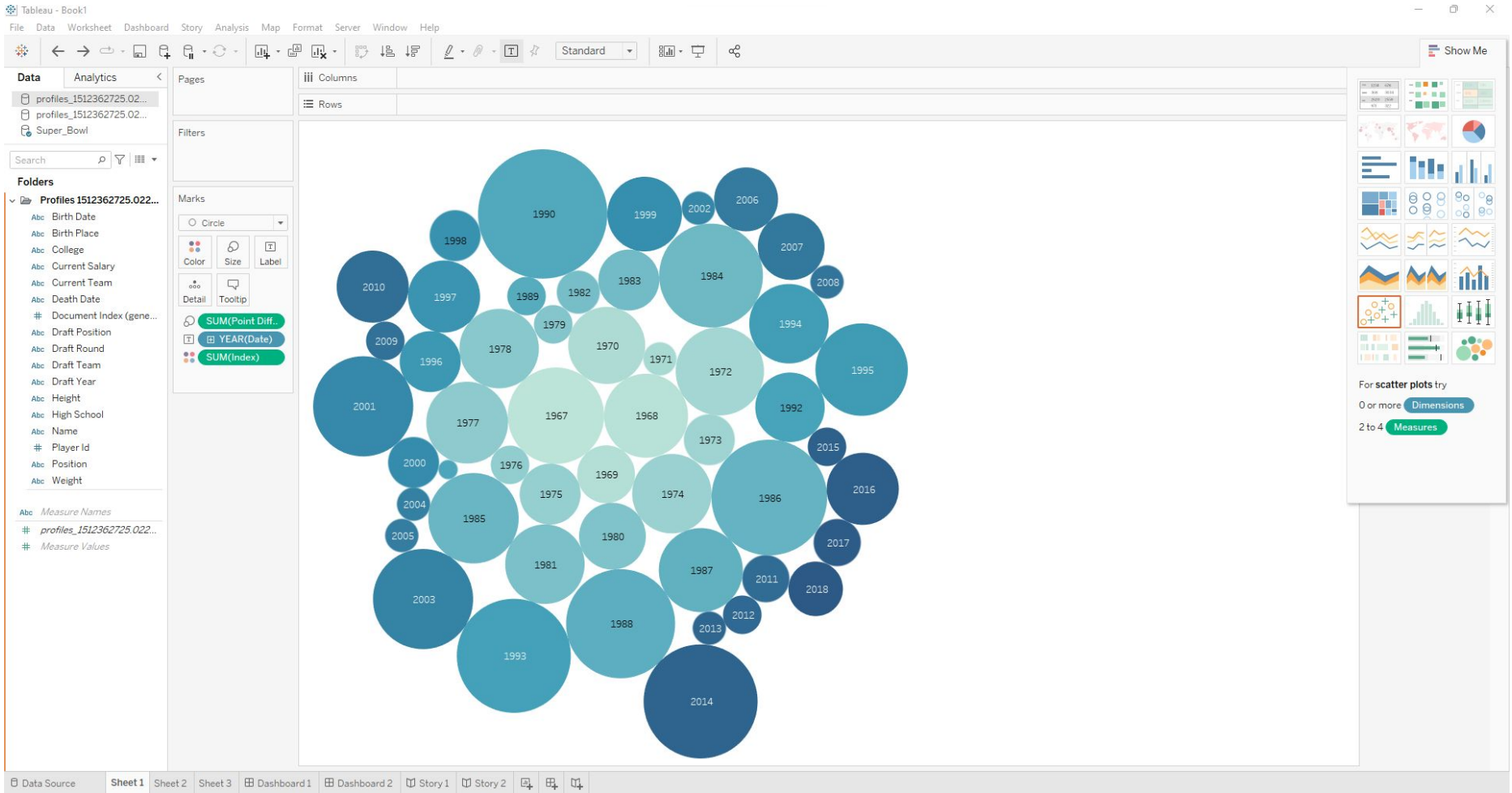E. Click this icon to go to the Start page, where you can connect to data. For more information, see Start Page.

F. Side Bar - In a worksheet, the side bar area contains the Data pane and the Analytics pane.

G. Click this tab to go to the Data Source page and view your data. For more information, see Data Source Page.

H. Status bar - Displays information about the current view.

I. Sheet tabs - Tabs represent each sheet in your workbook. This can include worksheets, dashboards, and stories. For more information, see Workbooks and Sheets.
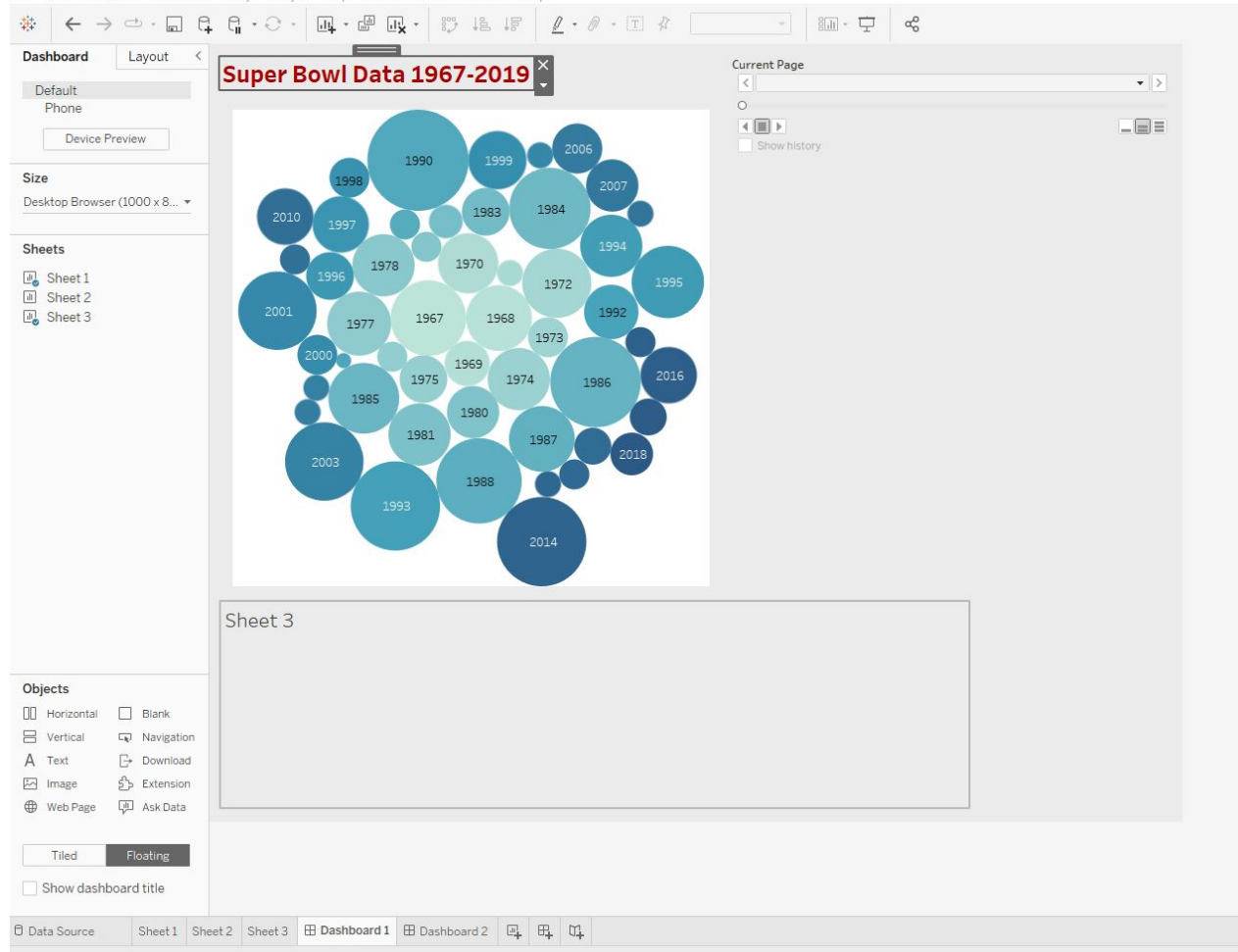
The Tableau Workspace - Tableau

Dashboards

With Tableau, you build a single visual at a time on a sheet and add it to a dashboard.

Sheets can be floating on the dashboard (resizable) or tiled (auto-sized).
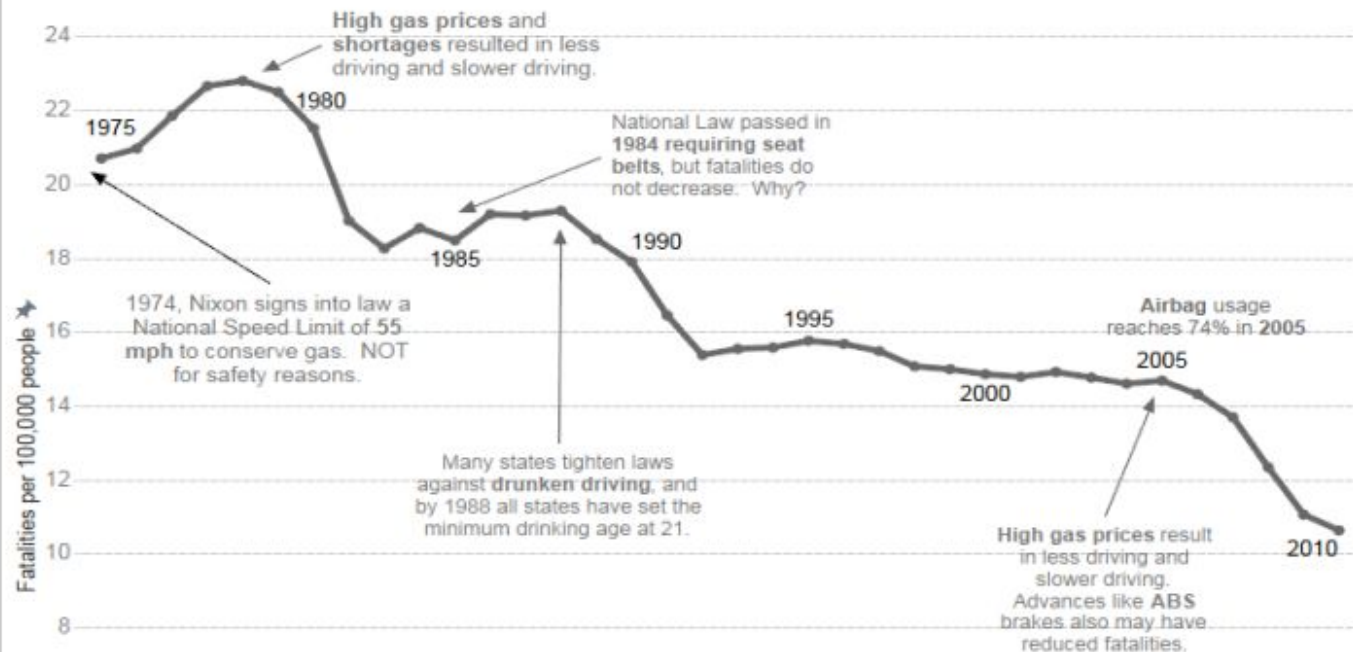
Dashboards - Tableau

Stories

A story is a sequence of visualizations that work together to convey information. You can create stories to tell a data narrative, provide context, demonstrate how decisions relate to outcomes, or to simply make a compelling case.

Stories - Tableau

Why have driving fatalities decreased in the United States?

High gas prices and **shortages** resulted in less driving and slower driving.

1975

1980

National Law passed in **1984 requiring seat belts**, but fatalities do not decrease. Why?

1985

1990

1974, Nixon signs into law a National Speed Limit of **55 mph** to conserve gas. NOT for safety reasons.

1995

Airbag usage reaches 74% in **2005**

2005

2000

Many states tighten laws against **drunken driving**, and by 1988 all states have set the minimum drinking age at 21.

High gas prices result in less driving and slower driving. Advances like **ABS** brakes also may have reduced fatalities.

2010

Fatalities per 100,000 people

24

22

20

18

16

14

12

10

8

Table Calculations

Table calculations (much like calculated columns and measures in Power BI) transform data. Tableau has the ability to perform these calculations quickly on the visual level rather than in the database.
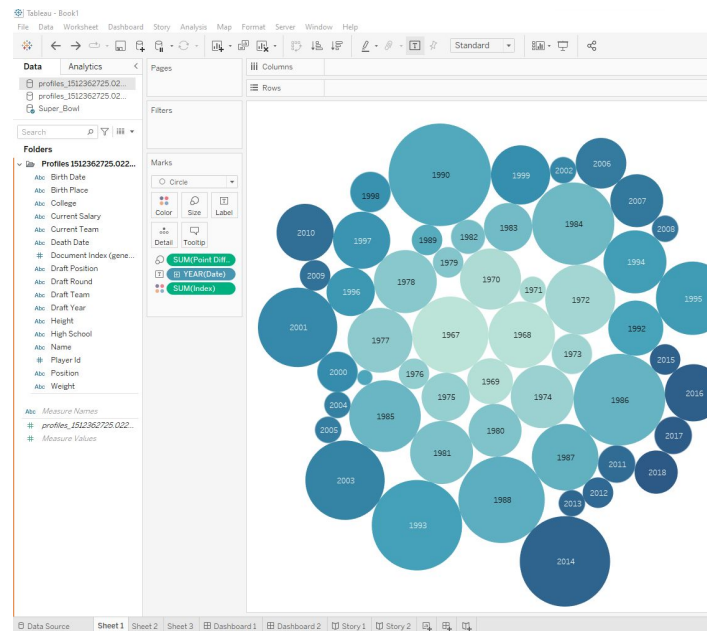
Transform Values with Table Calculations - Tableau

Shelves & Cards

Shelves contain your columns, rows, pages, and filters. You can drag and drop from the data pane into the shelves.

Cards contain your marks which determine color, size, data labels, details, and tooltips. You can drag and drop from the data pane into the marks fields.

Shelves and Cards Reference - Tableau

Tableau Features

Ask Data

Animations

Groups

Parameters

Calculations

Examples

[Tableau Dashboard Showcase](#)

[Workbook: SQL Joins Explained - The Burger Analogy (tableau.com)](#)

Resources

- Documentation: [Get Started - Tableau](#)
- Tutorial: [The Bookshop data set - Tableau](#)
- VizWiz: [(78) Andy Kriebel - YouTube](#)
- Visual Intelligence Consulting: [(78) Tableau Viz in Tooltip [4 Examples of Viz in Tooltip]](#) [-](#)
  [YouTube](#)