

Introduction

INTRODUCTION TO TABLEAU

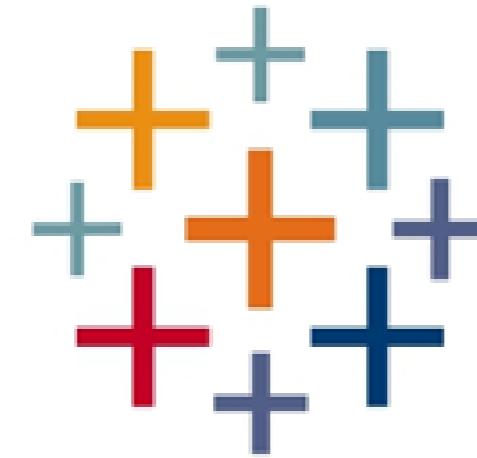


Maarten Van den Broeck

Content Developer at DataCamp

What is Tableau?

- Data visualization tool
- Click, drag, drop
- Beautiful, interactive visualizations



+ a b l e a u

Why use Tableau?

- Accessible...
- ...but complete
- Flexible
- Intuitive
- Quick and robust prototyping
- Frame (business) questions
- Import and clean data
- Analyze and visualize data
- Drive business decisions
- Present insights

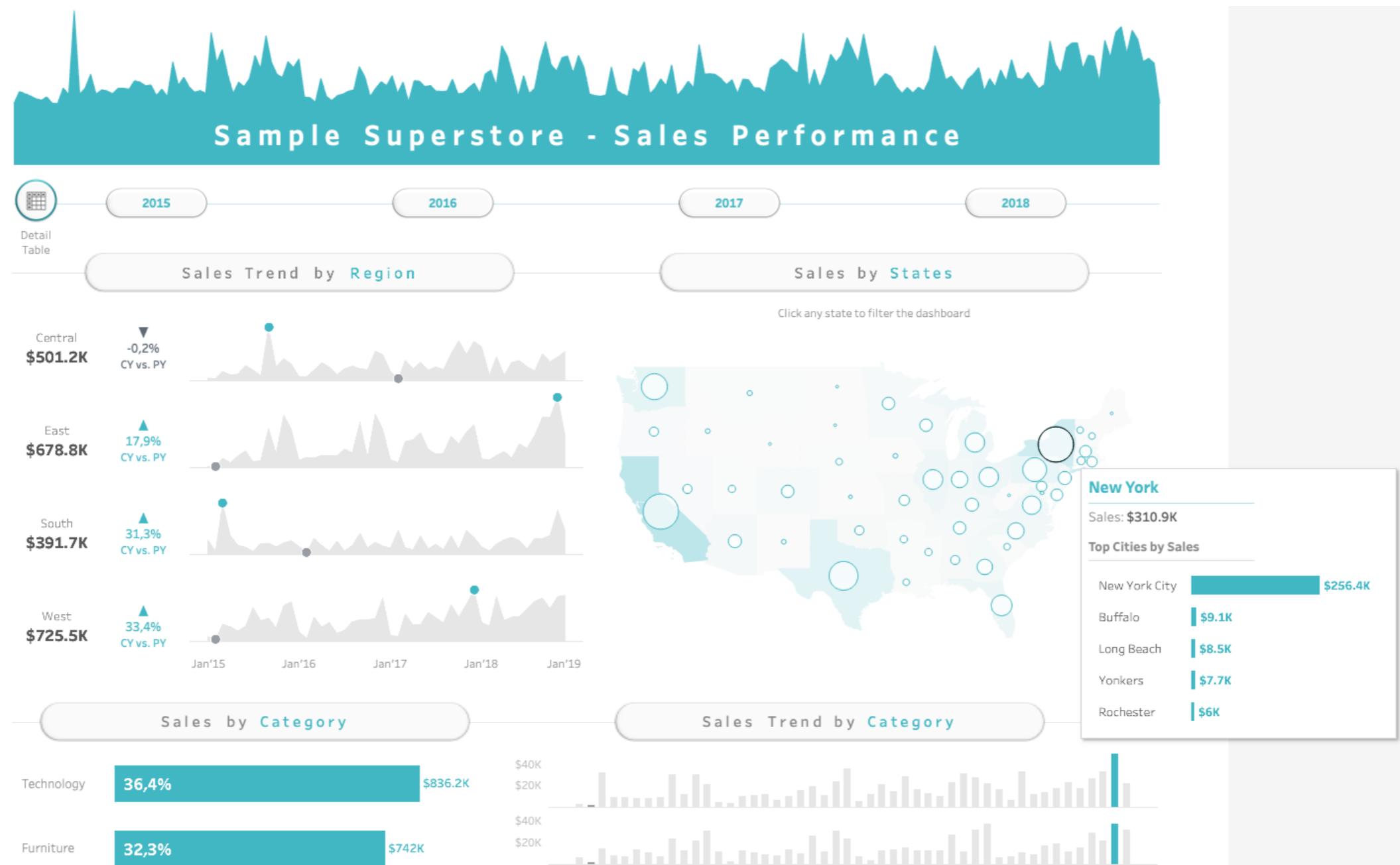


Who uses Tableau?

Roles

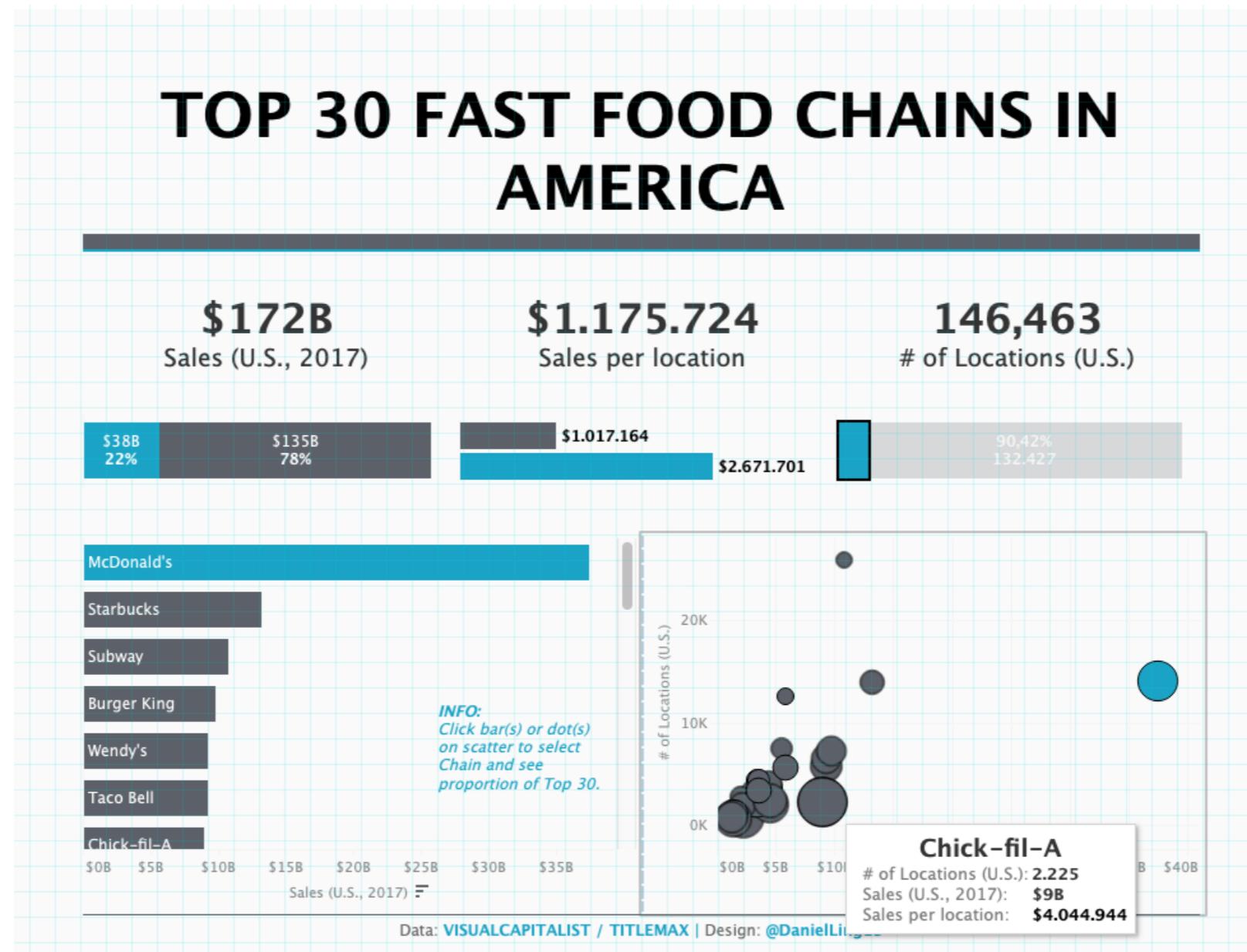
- Data analyst
- Business analyst
- Analytics consultant

Possibilities with Tableau



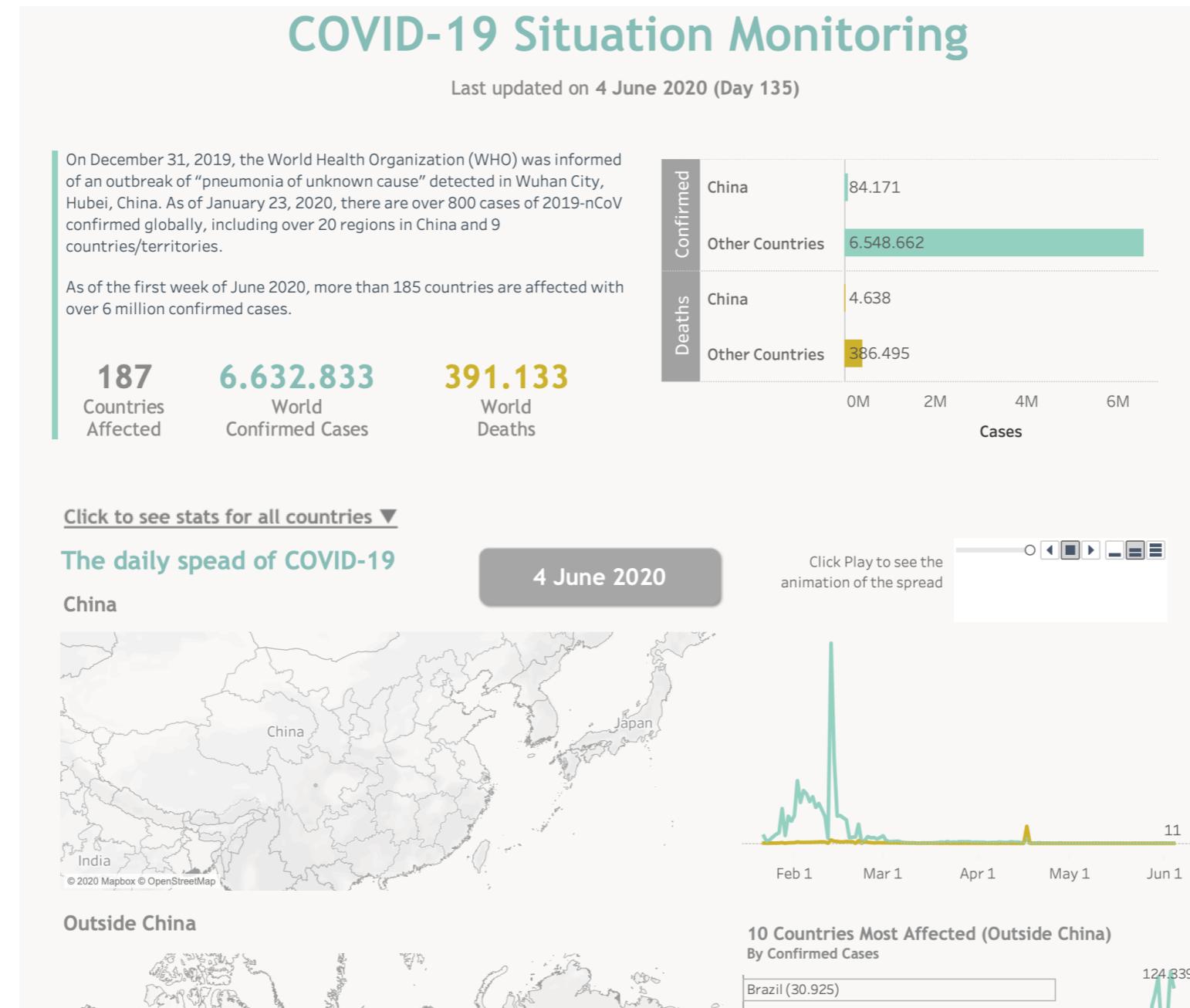
¹ Author: Pradeep Kumar G. Originally published on: Tableau Public

Possibilities with Tableau



¹ Author: Daniel Ling. Originally published on: Tableau Public

Possibilities with Tableau



¹ Author: Thi Ho. Originally published on: Tableau Public

Tableau versions

Tableau Public

- Free
- All visualizations included
- Connect to Excel and CSV files only
- 15 millions rows of data
- Save online only
- Public reports

Tableau Desktop

- Paid
- All visualizations included
- All listed data sources
- Unlimited rows of data
- Save locally

Let's practice!

INTRODUCTION TO TABLEAU

Connecting to data

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU

Navigating Tableau

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

Content Developer at DataCamp

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the far right is a "Show Me" button.

The left sidebar contains the "Data" tab selected, with a dropdown menu for "Analytics". Below it is a project named "san_francisco". A search bar and a filter icon are also present.

The main workspace is divided into several panes:

- Pages:** Shows a single page labeled "Sheet 1".
- Columns:** An empty pane where fields can be dropped.
- Rows:** An empty pane where fields can be dropped.
- Filters:** An empty pane.
- Marks:** A pane containing the "Automatic" mark type and four sub-options: Color, Size, Text, Detail, and Tooltip.

The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the far right, there's a "Show Me" button.

The left sidebar contains the "Data" tab, which is currently active, and the "Analytics" tab. Under "Data", a single item, "san_francisco", is listed. Below this is a search bar and a "Tables" section listing various data fields:

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- ⊕ Latitude
- ⊕ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The main workspace is titled "Sheet 1". It features a large grid area with three "Drop field here" placeholder boxes. To the left of the grid is the "Marks" shelf, which is set to "Automatic" and includes options for Color, Size, Text, Detail, and Tooltip.

At the bottom of the interface, there's a toolbar with buttons for "Data Source", "Sheet 1", and other sheet navigation, along with a set of small icons on the right.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the right, there's a "Show Me" button.

The left sidebar contains the "Data" tab selected, with a dropdown menu set to "Analytics". Below it, a project named "san_francisco" is listed. A search bar and a filter dropdown are also present.

The main workspace is divided into several sections:

- Pages:** Shows "Sheet 1".
- Columns:** An empty section labeled "Drop field here".
- Rows:** An empty section labeled "Drop field here".
- Filters:** An empty section.
- Marks:** Set to "Automatic". Options include Color, Size, Text, Detail, and Tooltip.
- Tables:** A list of fields from the "san_francisco.csv" data source:
 - # Id
 - Abc Neighbourhood
 - # Reviews per Month
 - Abc Room type
 - Abc Measure Names
 - # Availability 2019
 - # Days Occupied in 2018
 - # F1
 - ⊕ Latitude
 - ⊕ Longitude
 - # Minimum Nights
 - # Number of Reviews
 - # Price
 - # san_francisco.csv (Count)
 - # Measure Values

At the bottom, the ribbon shows "Data Source" and "Sheet 1" tabs, along with other navigation and zoom controls.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the Data pane displays a project named "san_francisco" with a search bar and a "Tables" section containing various data fields. The "Reviews per Month" field is currently selected and highlighted with a blue border. The Marks shelf on the right provides options for "Automatic" marks (Color, Size, Text) or "Detail" and "Tooltip" marks. A large workspace area titled "Sheet 1" is shown with three empty drop zones labeled "Drop field here". At the bottom, the ribbon includes tabs for "Data Source" and "Sheet 1", along with other standard ribbon controls.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the Data pane displays a project named "san_francisco" with a search bar and a "Tables" section listing various data fields. The "Marks" shelf on the right lists "Automatic" marks (Color, Size, Text) and "Detail" and "Tooltip" options. The main workspace, "Sheet 1", features a grid with three columns and two rows, each labeled "Drop field here".

Data Analytics **san_francisco**

Search Y Columns

Tables

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- @ Latitude
- @ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

Sheet 1

Drop field here

Drop field here

Drop field here

Data Source **Sheet 1** + + +

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view dropdown. On the left, the "Data" pane displays a project named "san_francisco" with a search bar and a "Tables" section containing a list of fields. The "Measures" section is highlighted with a blue border. The central workspace is titled "Sheet 1" and features a grid with three columns and two rows, each labeled "Drop field here". To the right of the grid is a "Marks" shelf with options for Automatic, Color, Size, Text, Detail, and Tooltip. The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the right, there's a "Show Me" button.

The left sidebar contains the "Data" tab, which is active, and the "Analytics" tab. Under "Data", the "san_francisco" data source is selected. A search bar and a filter dropdown are also present.

The main workspace is titled "Sheet 1". It features a large grid area with three "Drop field here" placeholder labels. To the left of the grid is the "Marks" shelf, which is currently set to "Automatic" and displays options for Color, Size, Text, Detail, and Tooltip.

The "Tables" pane on the left lists various fields from the "san_francisco" data source, including:

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- @ Latitude
- @ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The field "# Availability 2019" is highlighted with a blue border.

The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. On the left, the 'Tables' shelf lists various data items, with 'Reviews per Month' selected and highlighted with a green border. A context menu is open over this item, displaying options such as 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Create', 'Convert to Discrete', 'Convert to Measure' (which is currently selected and highlighted in blue), 'Change Data Type', 'Geographic Role', 'Default Properties', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The main workspace is titled 'Sheet 1' and contains two blank rectangular drop zones labeled 'Drop field here'. The bottom navigation bar includes tabs for 'Data Source' and 'Sheet 1', along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. In the top left, there's a navigation bar with icons for file operations like back, forward, and search. Below it is a ribbon with tabs for 'Data' and 'Analytics'. A search bar and a 'san_francisco' connection are visible. On the left, a 'Tables' pane lists various data fields. One item, 'Reviews per Month', is highlighted with a green border and has a context menu open over it. This menu includes options like 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Create', 'Convert to Discrete' (which is selected and highlighted in blue), 'Convert to Measure', 'Change Data Type', 'Geographic Role', 'Default Properties', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The main workspace is titled 'Sheet 1' and contains two 'Drop field here' placeholder areas. At the bottom, there's a toolbar with icons for data source management, sheet navigation, and other common functions.

Data roles in Tableau

Discrete dimension

- Common, colored in blue
- Finite amount of values
- Can't be aggregated
- *E.g.* eye color, sex

Continuous measure

- Common, colored in green
- Infinite amount of values
- Can be aggregated
- *E.g.* height, weight

Data roles in Tableau

Discrete dimension

- Common, colored in blue
- Finite amount of values
- Can't be aggregated
- *E.g.* eye color, sex

Continuous dimension

- Not common, colored in green
- Infinite amount of values
- Can't be aggregated
- *E.g.* date

Discrete measure

- Not common, colored in blue
- Finite amount of values
- Can be aggregated
- *E.g.* shoe size, age

Continuous measure

- Common, colored in green
- Infinite amount of values
- Can be aggregated
- *E.g.* height, weight

Segmenting with dimensions

- Dimensions and measures affect visualizations differently:
 - Dimensions are used to **segment** data
 - Measures can be aggregated
- **Segmenting:** grouping similar data together
 - *E.g.* average price per room type

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the "Data" tab is selected, showing a connection to "san_francisco". Below it is a search bar and a "Tables" section listing various data fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The main workspace is titled "Sheet 1" and contains three blank rectangular areas labeled "Drop field here". The top right area has a blue highlight over the word "Neighbourhood". The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the "Data" pane is open, displaying a connection named "san_francisco". Below it is a "Tables" section listing various data fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The main workspace is titled "Sheet 1" and contains three empty rectangular drop zones labeled "Drop field here". The bottom navigation bar features tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the far right is a "Show Me" button.

The left sidebar contains the "Data" tab selected, showing a single data source named "san_francisco". Below it is a search bar and a "Tables" section listing various fields:

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- ⊕ Latitude
- ⊕ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The main workspace is divided into four panes:

- Pages:** Shows "Sheet 1".
- Columns:** A header row with three columns, the first of which is labeled "Drop field here".
- Rows:** A header row with two columns, the second of which is labeled "Drop field here".
- Marks:** A panel containing a dropdown menu set to "Automatic" and four buttons: "Color", "Size", "Text", "Detail", and "Tooltip".

At the bottom, there is a toolbar with icons for "Data Source", "Sheet 1", and other sheet navigation, along with a set of small preview icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the "Data" tab is selected in the top navigation bar, and the "san_francisco" data source is chosen from the dropdown. The "Tables" section lists various fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The "Rows" shelf at the top of the workspace is active, indicated by a blue border. The main workspace is titled "Sheet 1" and contains three blank rectangular drop zones labeled "Drop field here". The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the right, there's a "Show Me" button.

The left sidebar contains the "Data" tab selected, showing a connection named "san_francisco". Below it is a search bar and a "Tables" section listing various data fields:

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- ⊕ Latitude
- ⊕ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The main workspace consists of three main areas: the "Marks" shelf on the left, the "Sheet 1" canvas in the center, and the "Columns" and "Rows" shelves at the top right.

The "Marks" shelf is set to "Automatic" and includes options for Color, Size, Text, Detail, and Tooltip.

The "Sheet 1" canvas has three empty drop zones labeled "Drop field here" in each row.

The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Show Me" button. The left sidebar has tabs for "Data" and "Analytics", with "Data" selected. Under "Data", there is a connection named "san_francisco". A search bar and a filter icon are also present. The main workspace is titled "Sheet 1" and contains three empty rectangular fields labeled "Drop field here". On the left, there are three panes: "Filters" (which is currently active and highlighted with a blue border), "Columns" (with a single row entry), and "Rows" (empty). Below these is the "Marks" pane, which is set to "Automatic" and offers options for Color, Size, Text, Detail, and Tooltip. At the bottom of the interface are standard Tableau navigation buttons for data source management, sheet switching, and zooming.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view dropdown. On the left, the "Data" pane is open, displaying a project named "san_francisco" with a search bar and a list of available tables. The "Tables" list includes: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The "Marks" shelf, located below the tables list, is currently set to "Automatic" and shows options for Color, Size, Text, Detail, and Tooltip. The main workspace, titled "Sheet 1", contains three empty drop zones labeled "Drop field here". The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the Data pane lists a single data source named "san_francisco". The Columns pane and Rows pane are empty. The Marks pane is open, showing the "Automatic" mark type selected, with options for Color, Size, Text, Detail, and Tooltip.

Data Analytics **san_francisco**

Search Y Columns

Tables

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- # Latitude
- # Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

Sheet 1

Drop field here

Drop field here

Drop field here

Data Source Sheet 1 + + +

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the "Data" pane displays a project named "san_francisco" with a search bar and a "Tables" section listing various data fields. The "Marks" shelf, which is currently open, lists various visualization types: Automatic, Bar, Line, Area, Square, Circle, Shape, Text, Map, Pie, Gantt Bar, Polygon, and Density. The "Marks" dropdown is set to "Automatic". The main workspace is titled "Sheet 1" and contains three empty "Drop field here" placeholder boxes. The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau Data Prep interface. On the left, there's a sidebar with a "Data" tab selected, showing a list of tables: "san_francisco" (highlighted), "Id", "Neighbourhood", "Reviews per Month" (selected), "Room type", "Measure Names", "Availability 2019", "Days Occupied in 2018", "F1", "Latitude", "Longitude", "Minimum Nights", "Number of Reviews", "Price", "san_francisco.csv (Count)", and "Measure Values". Below the table list are sections for "Filters" and "Marks". The "Marks" section includes options for "Automatic" (selected), "Color", "Size", "Text", "Detail", and "Tooltip". The main workspace is titled "Sheet 1" and contains three large, empty rectangular fields with the placeholder text "Drop field here" in each. At the bottom of the workspace are tabs for "Data Source" and "Sheet 1". The top navigation bar includes icons for back, forward, search, and various file operations, along with a "Standard" view switcher and a "Show Me" button.

Our business question

Which neighborhood and room type has the highest price in New York?

Let's practice!

INTRODUCTION TO TABLEAU

A tour of the interface

INTRODUCTION TO TABLEAU



Hadrien Lacroix

Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU

How to create visualizations in Tableau

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU