

Introduction

INTRODUCTION TO TABLEAU

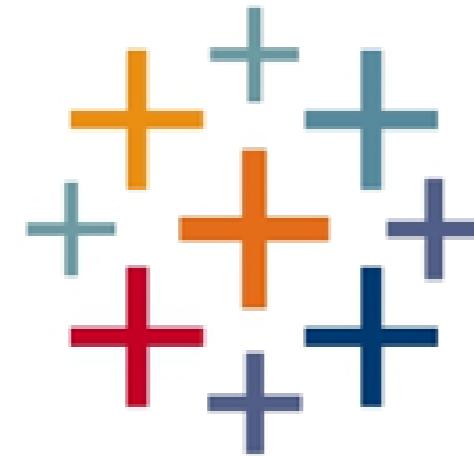


Maarten Van den Broeck

Content Developer at DataCamp

What is Tableau?

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



+ tableau

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

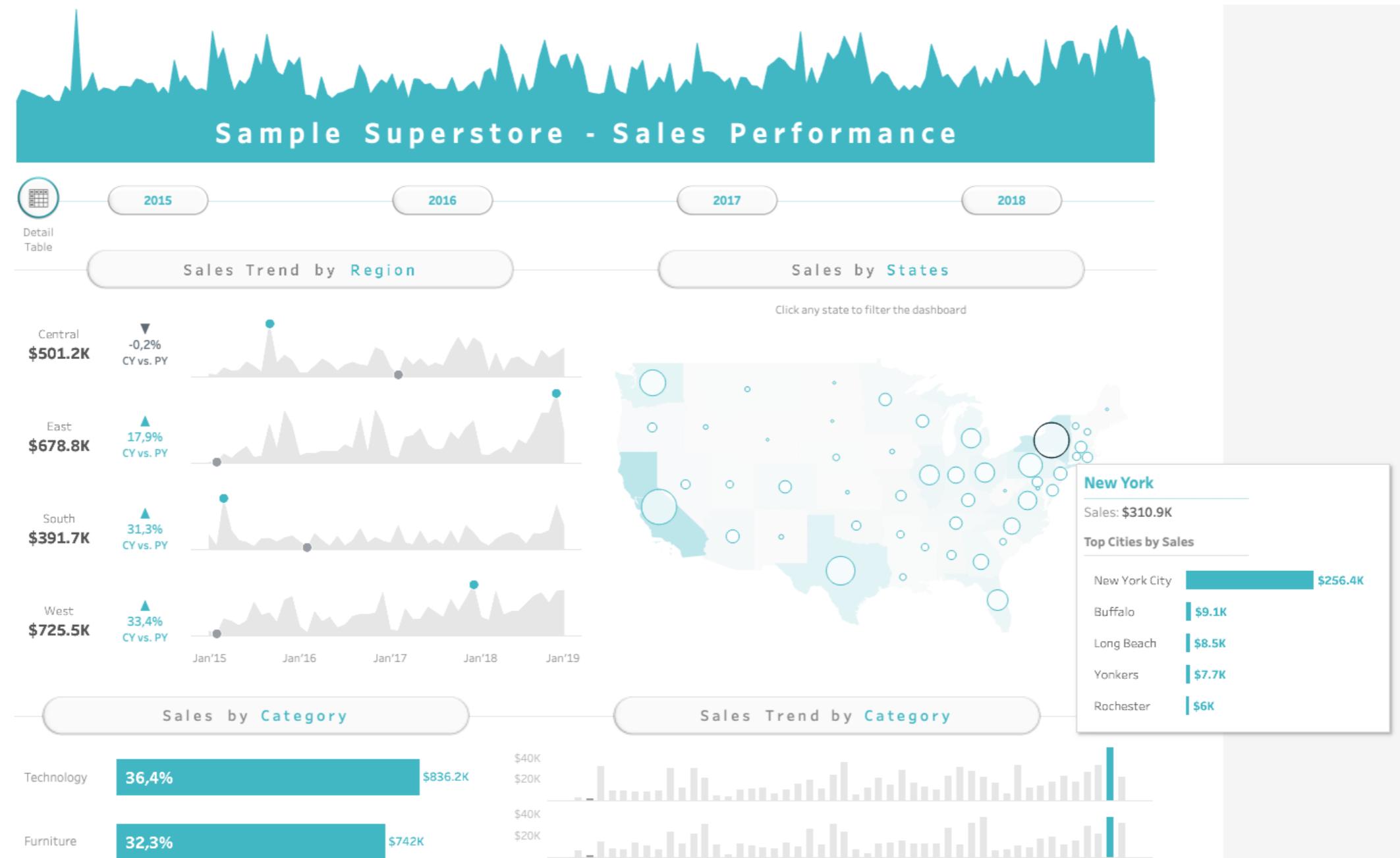


Who uses Tableau?

Roles

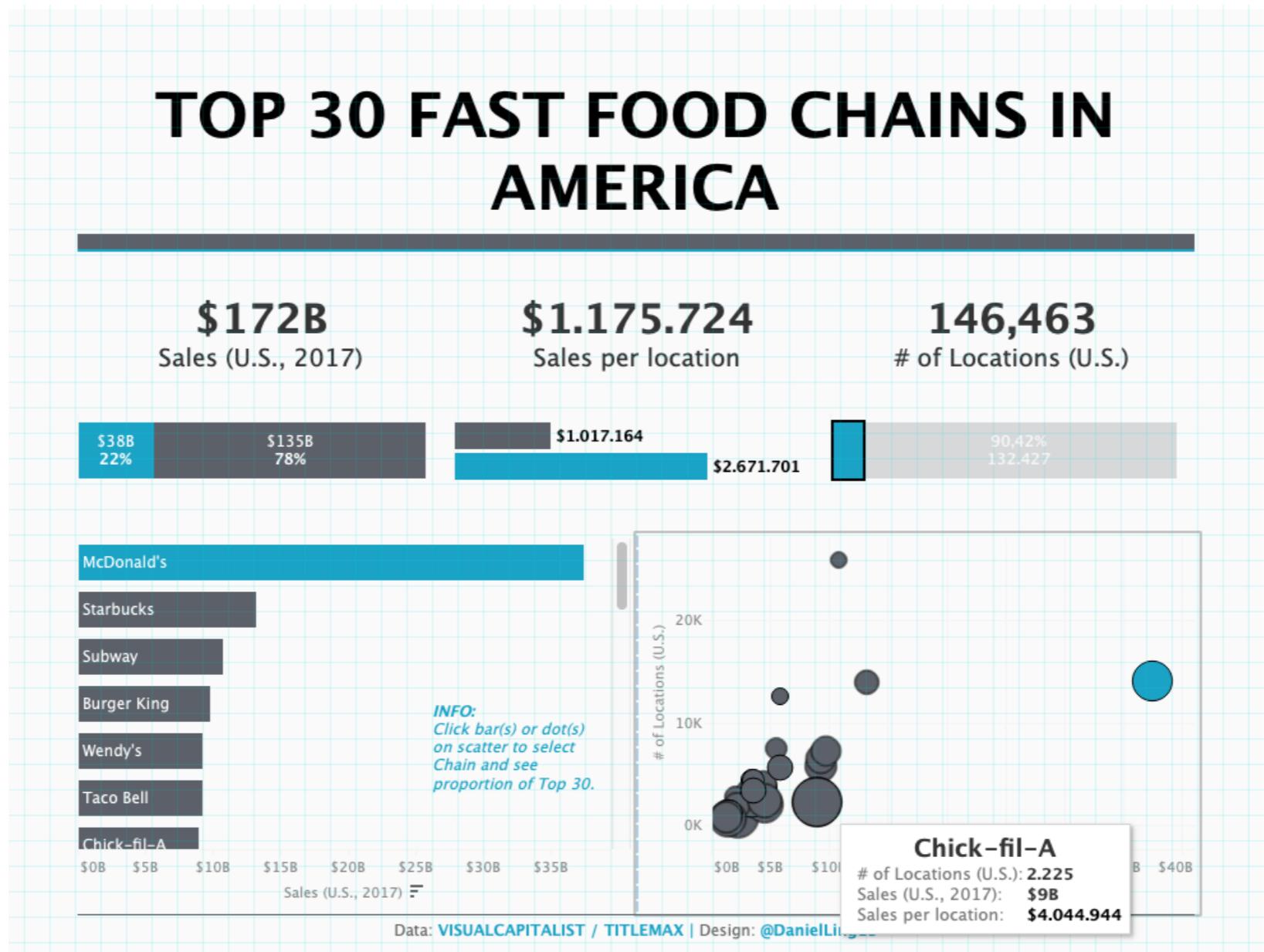
- Data analyst
- Business analyst
- Analytics consultant

Possibilities with Tableau



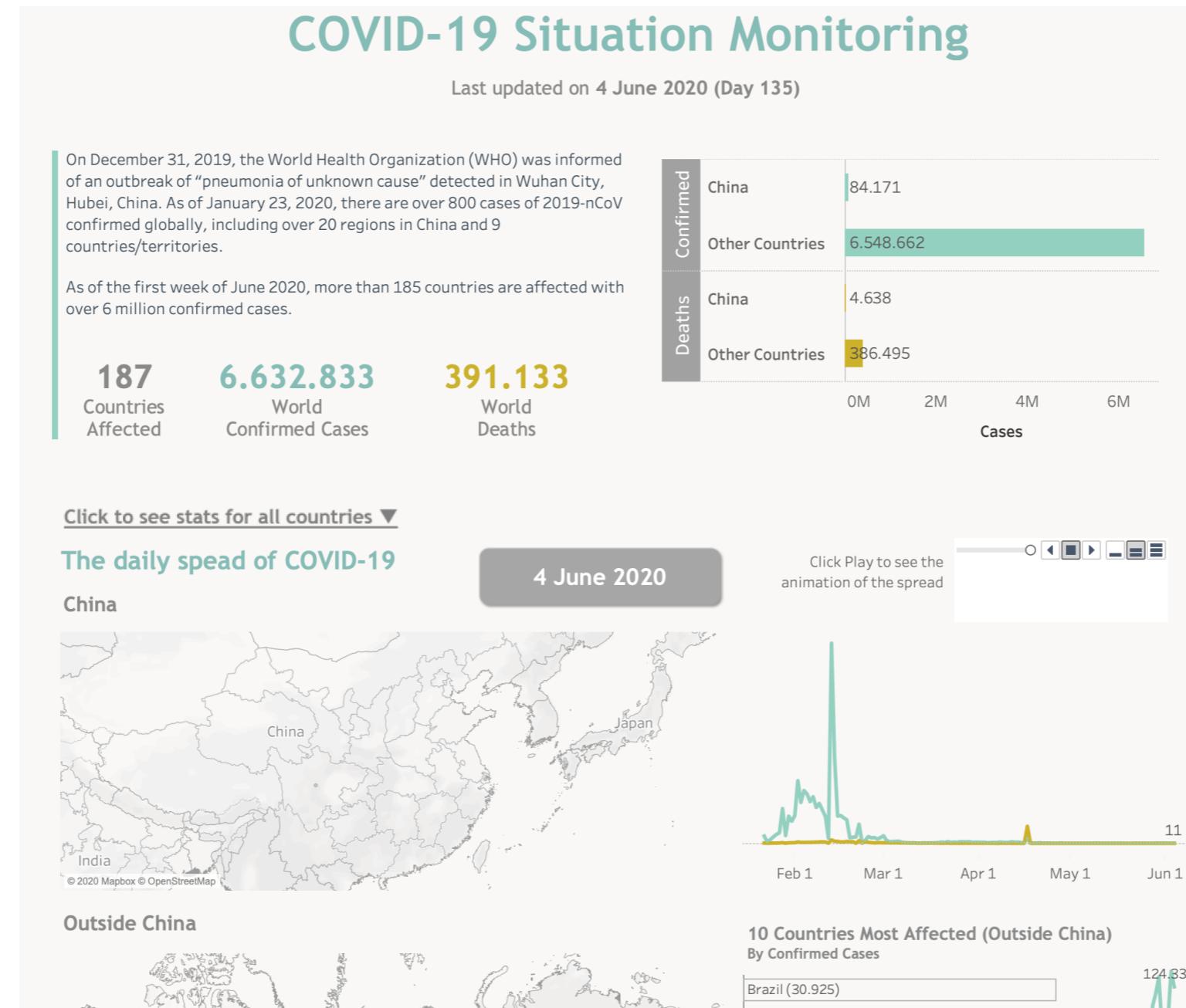
¹ Author: Pradeep Kumar G. Originally published on: Tableau Public

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

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Let's practice!

INTRODUCTION TO TABLEAU

Navigating Tableau

INTRODUCTION TO TABLEAU



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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 selected, with a dropdown menu for "Analytics". Below it, a project named "san_francisco" is listed. A search bar and a filter icon are also present.

The main workspace is divided into several panes:

- Pages:** Shows "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 right, there's a "Show Me" button.

The left side features the "Data" pane, which is currently set to "Analytics". It displays a list of data sources under "Tables", with "san_francisco" selected. Other listed items include "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". It consists of a grid with four quadrants, each labeled "Drop field here". The top-left quadrant has a "Marks" panel open, showing options for "Automatic" marks (Color, Size, Text) and "Detail" and "Tooltip" options.

At the bottom, the ribbon shows "Data Source" and "Sheet 1" tabs, along with other workspace management icons.

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The left sidebar contains the "Data" tab, which is currently selected, and the "Analytics" tab. Under "Data", a connection named "san_francisco" is listed. Below the tabs is a search bar and a "Tables" section containing a list of 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 three large, empty rectangular areas labeled "Drop field here" in each corner. To the left of these areas is the "Marks" pane, which includes a dropdown menu set to "Automatic" and four buttons: "Color", "Size", "Text", "Detail", and "Tooltip".

At the bottom of the interface is a toolbar with various icons for navigating between sheets, saving, and publishing. The status bar at the very bottom displays the current sheet name ("Sheet 1") and other system information.

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" marking and allows for color, size, text, detail, and tooltip customizations. A large workspace titled "Sheet 1" is shown with 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. Under "Automatic", there are four options: Color, Size, Text, Detail, and Tooltip. The main workspace is titled "Sheet 1" and contains three empty rectangular drop zones labeled "Drop field here" in each row.

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

Pages

Filters

Marks

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

Sheet 1

Drop field here

Drop field here

Drop field here

Data Source Sheet 1 + New + New + New

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 currently active, and the "Analytics" tab. Under "Data", a connection named "san_francisco" is listed. Below the tabs is a search bar and a "Tables" section displaying various fields from the 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

The "Marks" shelf on the right side of the interface is currently set to "Automatic". It includes options for Color, Size, and Text, as well as Detail and Tooltip.

The main workspace is titled "Sheet 1" and features a blank canvas with three "Drop field here" placeholder boxes.

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. 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. 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' (which is currently 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 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.

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 project named "san_francisco" and a list of fields under "Tables". The fields listed are: 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. Below the Data pane are sections for "Pages", "Columns", and "Rows". The main workspace is titled "Sheet 1" and contains three empty 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 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 titled "Sheet 1". It features three large rectangular drop zones labeled "Drop field here" in each corner. To the left of these zones is a "Marks" shelf with options for Color, Size, Text, Detail, and Tooltip, currently set to "Automatic". Above the workspace are two panes: "Columns" and "Rows", both currently empty.

At the bottom of the interface are tabs for "Data Source" and "Sheet 1", along with standard window control buttons (Minimize, Maximize, Close) and a horizontal scroll bar.

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 named "san_francisco". Below it is a search bar and a "Tables" section listing various data fields. The main workspace is titled "Sheet 1" and contains three large, empty rectangular areas labeled "Drop field here" in each corner. To the right of these areas is a "Marks" shelf with options for Color, Size, Text, Detail, and Tooltip. The bottom navigation bar features tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

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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
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- # F1
- @ Latitude
- @ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The main workspace is divided into three sections: "Sheet 1" (top right), "Drop field here" (left and bottom right). The "Marks" shelf on the right side of the workspace lists four options: Color, Size, Text, Detail, and Tooltip, with "Automatic" selected.

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 "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 workspace, there are buttons 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 dropdown. On the left, the "Data" pane is open, displaying a project named "san_francisco" and a list of available fields under "Tables". The "Marks" shelf, located on the far left, is highlighted with a blue border and contains options for "Automatic" marks (Color, Size, Text) and "Detail" and "Tooltip" marks. The main workspace is titled "Sheet 1" and features 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 "Standard" view dropdown. On the far right, there's a "Show Me" button.

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

The main workspace is divided into several sections:

- Pages:** Shows "Sheet 1" currently selected.
- Columns:** A section where fields can be dragged into columns.
- Rows:** A section where fields can be dragged into rows.
- Filters:** A section for defining filters.
- Marks:** A section for defining the type of visualization (e.g., Automatic, Color, Size, Text, Detail, Tooltip).

The central area is labeled "Sheet 1" and features three "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 tabs for 'Data' and 'Analytics'. Under 'Data', a connection named 'san_francisco' is listed. Below it is a search bar and a 'Tables' section containing various fields: 'Id', 'Neighbourhood', 'Reviews per Month' (which is highlighted with a green border), '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'. A 'Filters' section is also present. The main area is titled 'Sheet 1' and contains a large grid with placeholder text 'Drop field here' in each cell. To the right of the grid is a 'Marks' menu with options like Automatic, Bar, Line, Area, Square, Circle, Shape, Text, Map, Pie, Gantt Bar, Polygon, and Density. The bottom navigation bar includes buttons for 'Data Source', 'Sheet 1', and other sheet icons.

The screenshot shows the Tableau Data Prep 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 project named "san_francisco". A search bar and a filter dropdown are also present. The main area is titled "Sheet 1" and contains three large, empty rectangular fields labeled "Drop field here". To the left of these fields is a sidebar with sections for "Tables", "Pages", "Columns", and "Rows". The "Tables" section lists various data fields: "Id", "Neighbourhood", "Reviews per Month" (which is highlighted with a green border), "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 tables are sections for "Filters" and "Marks". The "Marks" section is set to "Automatic" and includes options for "Color", "Size", "Text", "Detail", and "Tooltip". At the bottom, there are tabs for "Data Source" and "Sheet 1", along with a toolbar containing various icons.

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



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How to create visualizations in Tableau

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