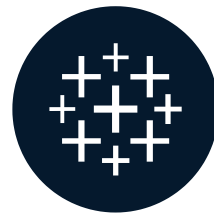


Introduction

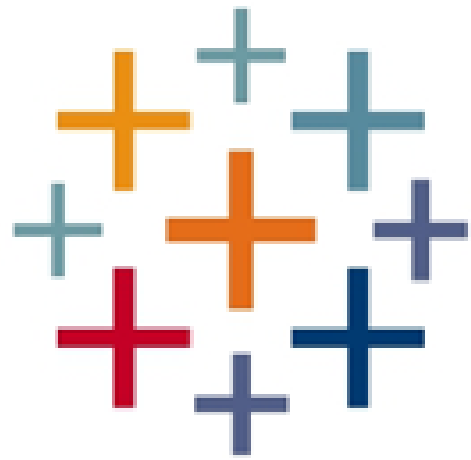
INTRODUCTION TO TABLEAU



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

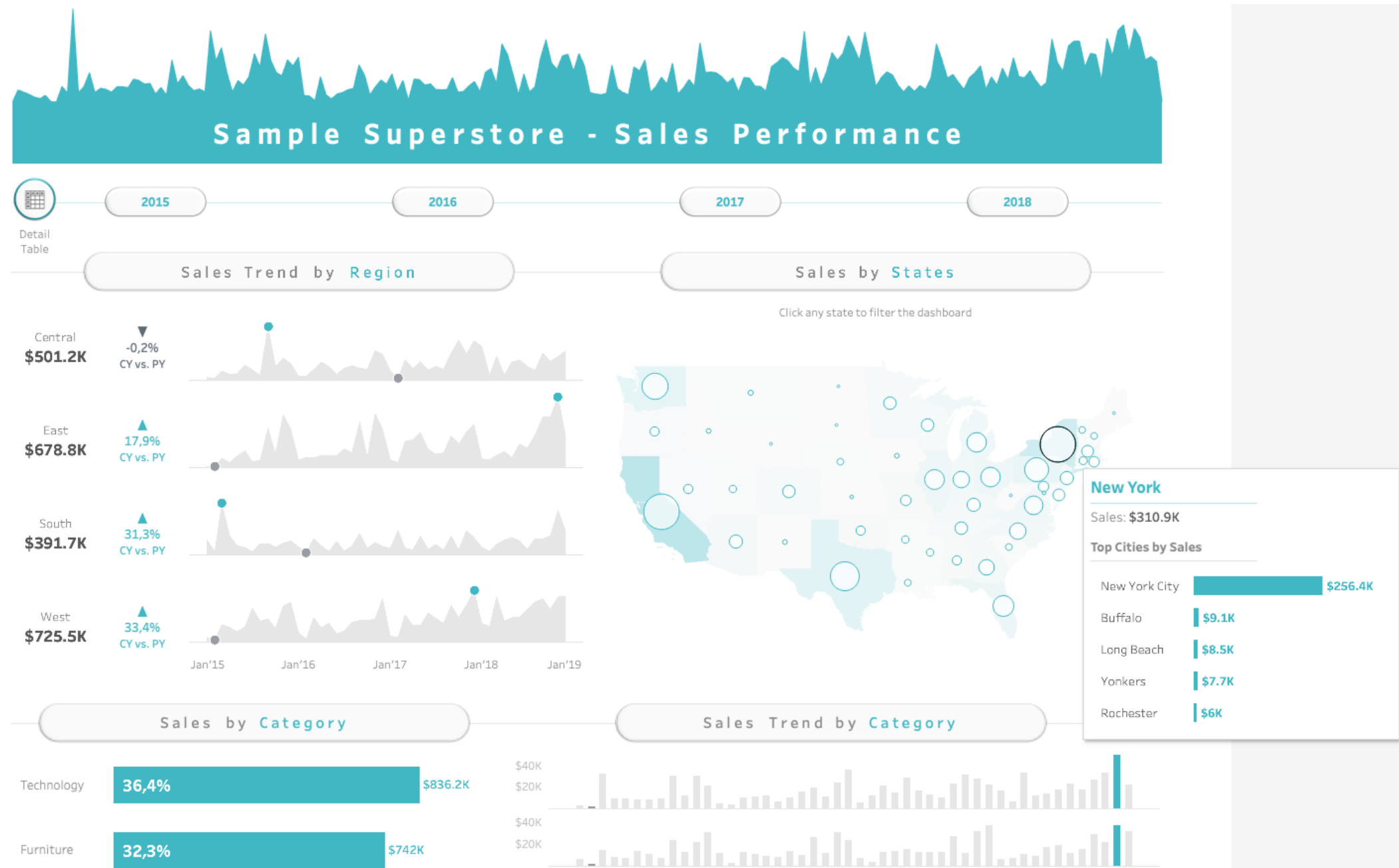


Who uses Tableau?

Roles

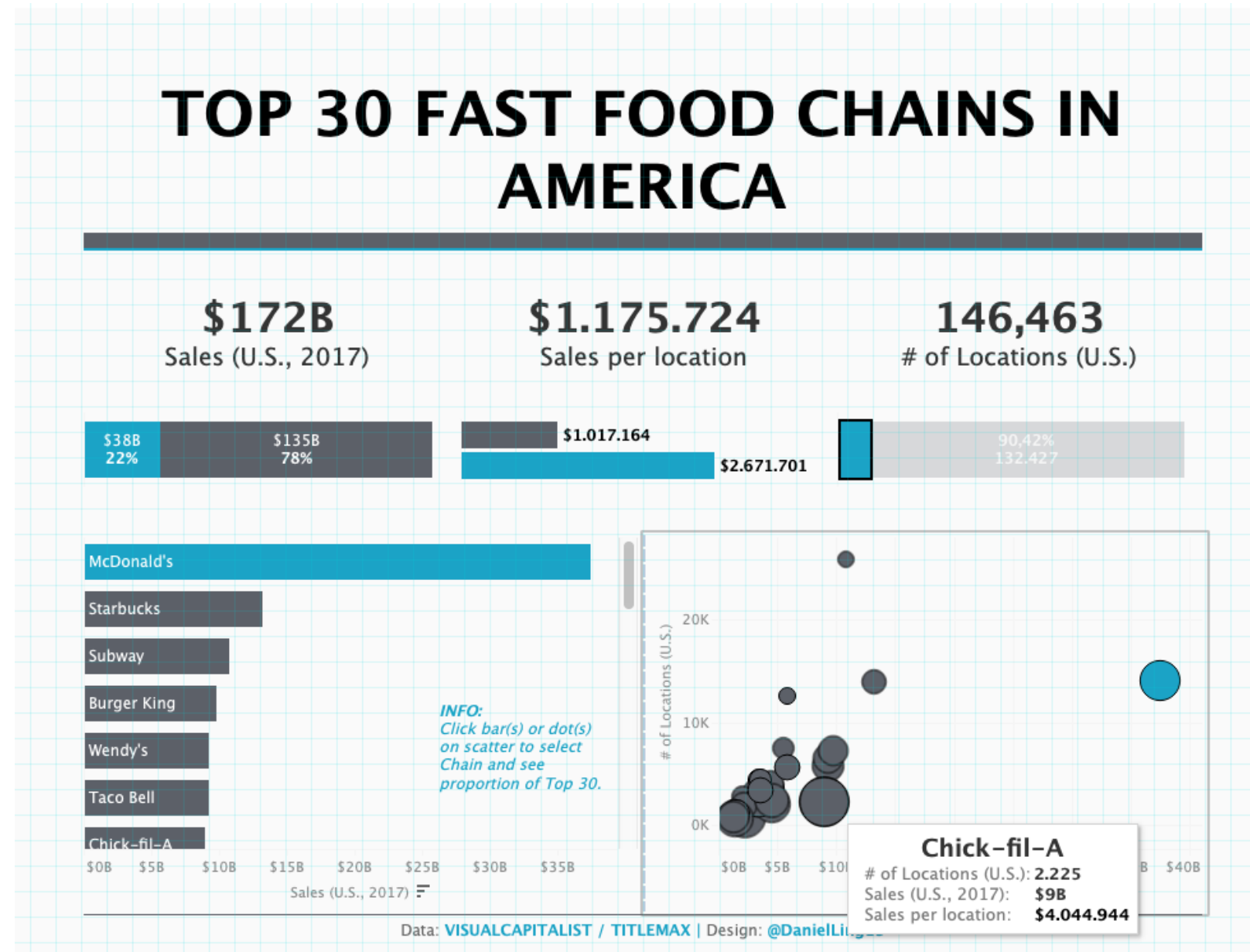
- Data analyst
- Business analyst
- Analytics consultant

Possibilities with Tableau



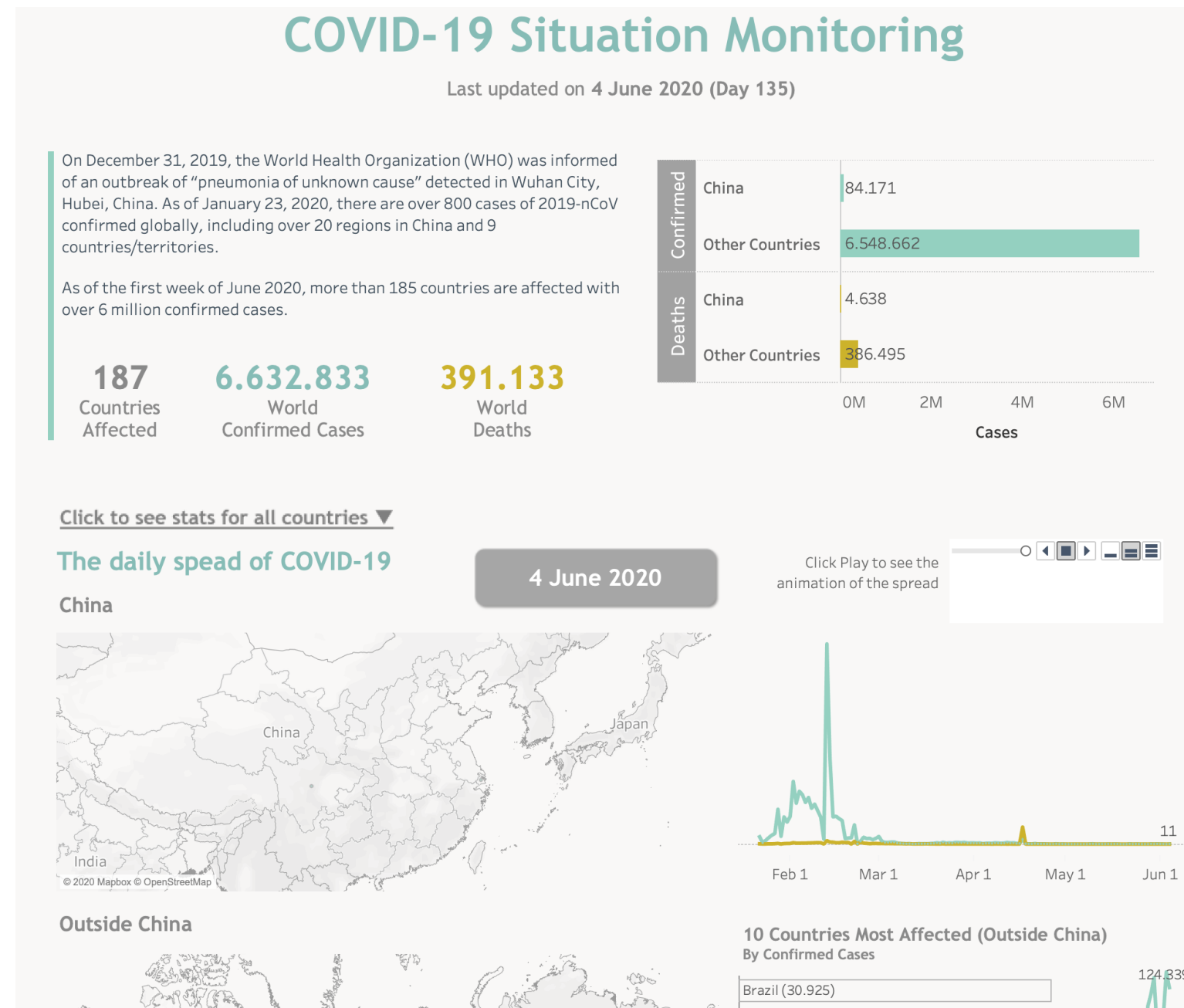
¹ Author: Pradeep Kumar G. Originally published on: Tableau Public

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

Tableau versions

Tableau Public

- Free
- All visualizations included
- Connect to Excel and CSV files only
- 15 millions rows of data
- Publish online¹

¹ NEW: Since April 2024, users CAN save their work locally using Tableau Public

Tableau versions

Tableau Public

- Free
- All visualizations included
- Connect to Excel and CSV files only
- 15 millions rows of data
- Publish online¹

Tableau Desktop

- Paid
- All visualizations included
- All listed data sources
- Unlimited rows of data
- Publish online and save locally

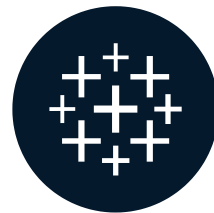
¹ Since April 2024, users can save their work locally using Tableau Public

Let's practice!

INTRODUCTION TO TABLEAU

Connecting to data

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

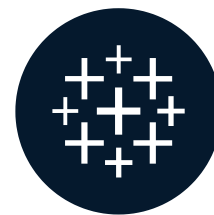
Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU

Navigating Tableau

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

Content Developer at DataCamp

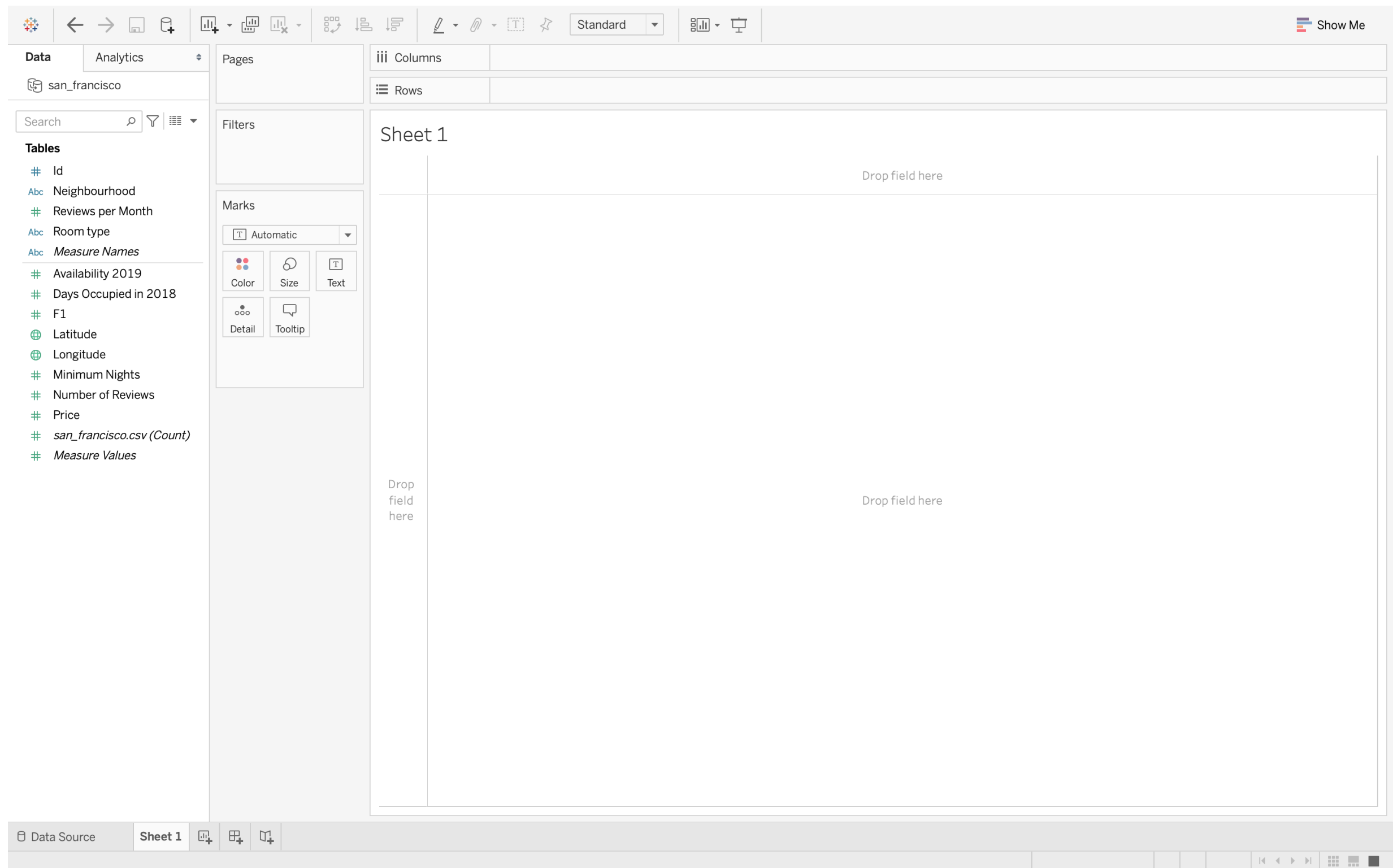


Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists tables and fields for the 'san_francisco' data source. The 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic'. The main view area is labeled 'Sheet 1' and contains three 'Drop field here' prompts.

Data | Analytics

san_francisco

Search

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

Columns

Rows

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

Sheet 1

Drop field here

Drop field here

Drop field here

Data Source | Sheet 1

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including '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 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic' and shows options for Color, Size, Text, Detail, and Tooltip. The main view area is labeled 'Sheet 1' and contains the text 'Drop field here'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including 'Reviews per Month', 'Availability 2019', 'Days Occupied in 2018', 'F1', 'Latitude', 'Longitude', 'Minimum Nights', 'Number of Reviews', 'Price', 'san_francisco.csv (Count)', and 'Measure Values'. The 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic' and is empty. The main view area is labeled 'Sheet 1' and contains the text 'Drop field here'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists tables and fields for the 'san_francisco' data source. The 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic'. The main view area is labeled 'Sheet 1' and contains a large empty space with a 'Drop field here' prompt.

Data | Analytics

san_francisco

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Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' shelf. The 'Data' pane lists fields from the 'san_francisco' data source, including '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 'Reviews per Month' field is highlighted in green. A context menu is open over the 'Reviews per Month' field, showing options: 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Create', 'Convert to Discrete', 'Convert to Measure' (highlighted in blue), 'Change Data Type', 'Geographic Role', 'Default Properties', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The main workspace is labeled 'Sheet 1' and contains two 'Drop field here' prompts. The bottom status bar shows 'Data Source' and 'Sheet 1'.

The image shows the Tableau Desktop interface. On the left, the 'Data' pane displays a list of tables and fields. The 'Reviews per Month' field is highlighted in green. A context menu is open over this field, listing various actions such as 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Create', 'Convert to Discrete' (which is highlighted in blue), 'Convert to Measure', 'Change Data Type', 'Geographic Role', 'Default Properties', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The main workspace shows 'Sheet 1' with a 'Columns' shelf containing the 'Reviews per Month' field. The 'Rows' shelf is empty. The background of the workspace is light gray with a grid pattern. The top of the interface shows the 'Standard' toolbar with various icons for navigation and editing. The bottom of the interface shows the 'Data Source' and 'Sheet 1' tabs, along with a status bar.

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

Tableau interface showing the 'Data' pane on the left, the 'Columns' shelf with 'Neighbourhood' in the 'Rows' shelf, and the 'Marks' shelf. The main view is 'Sheet 1' with a blank canvas and 'Drop field here' prompts. The 'Data Source' pane shows 'san_francisco' and a list of fields including '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'.

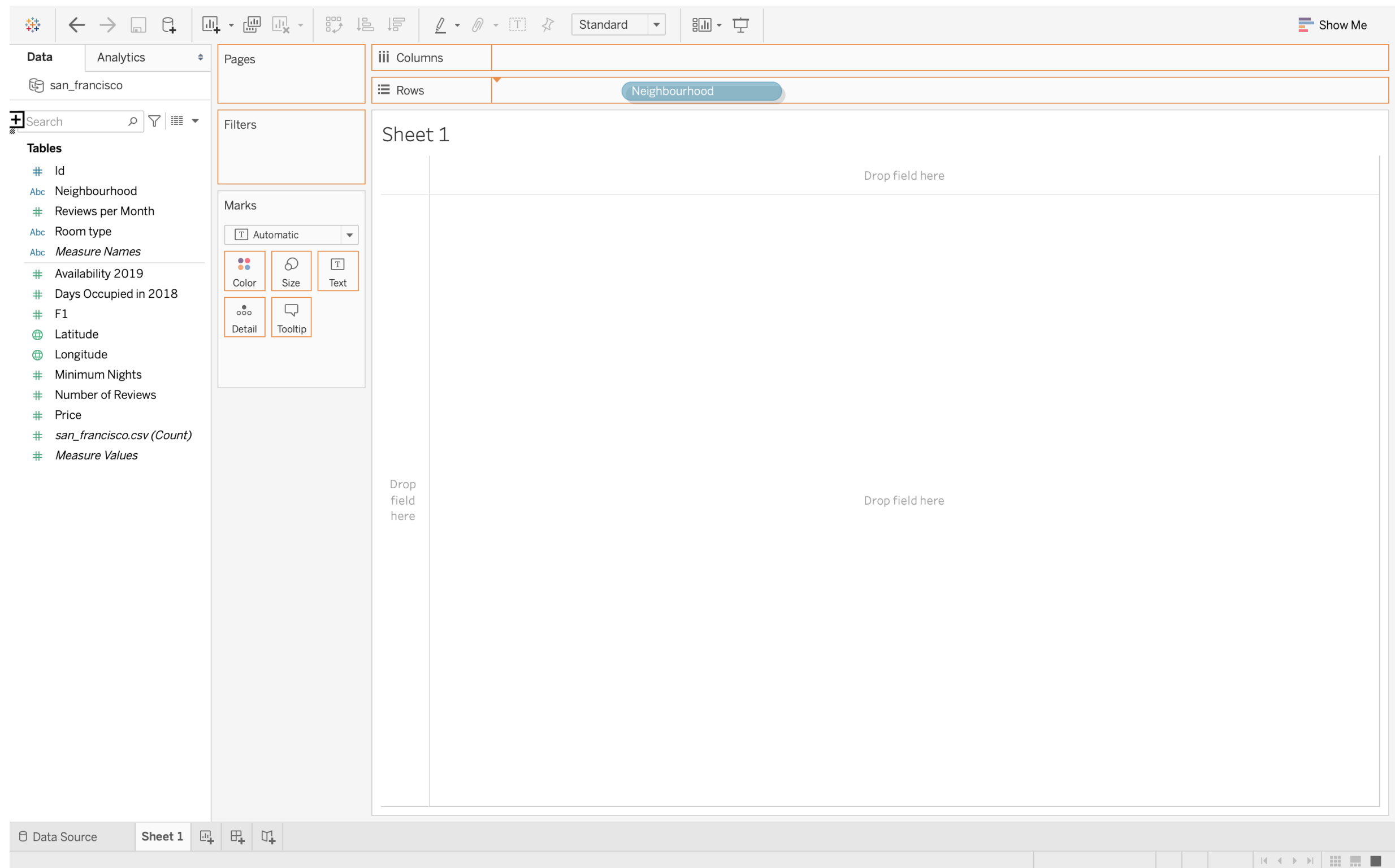
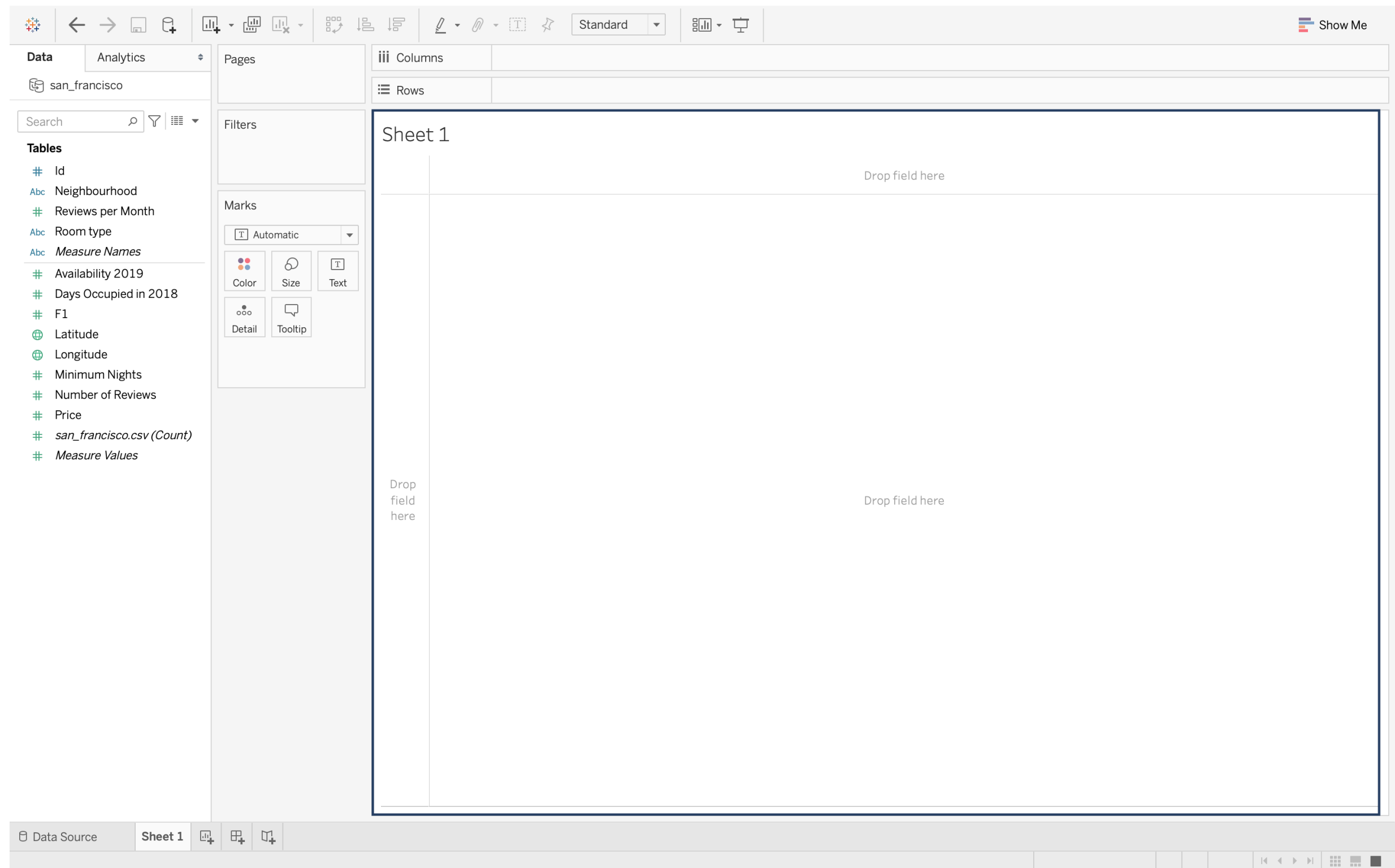


Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields for 'san_francisco', including 'Id', 'Neighbourhood', 'Reviews per Month', 'Room type', 'Measure Names', 'Availability 2019', 'Days Occupied in 2018', 'F1', 'Latitude', 'Longitude', 'Minimum Nights', 'Number of Reviews', 'Price', 'san_francisco.csv (Count)', and 'Measure Values'. The 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic'. The main view area is labeled 'Sheet 1' and contains three 'Drop field here' prompts.

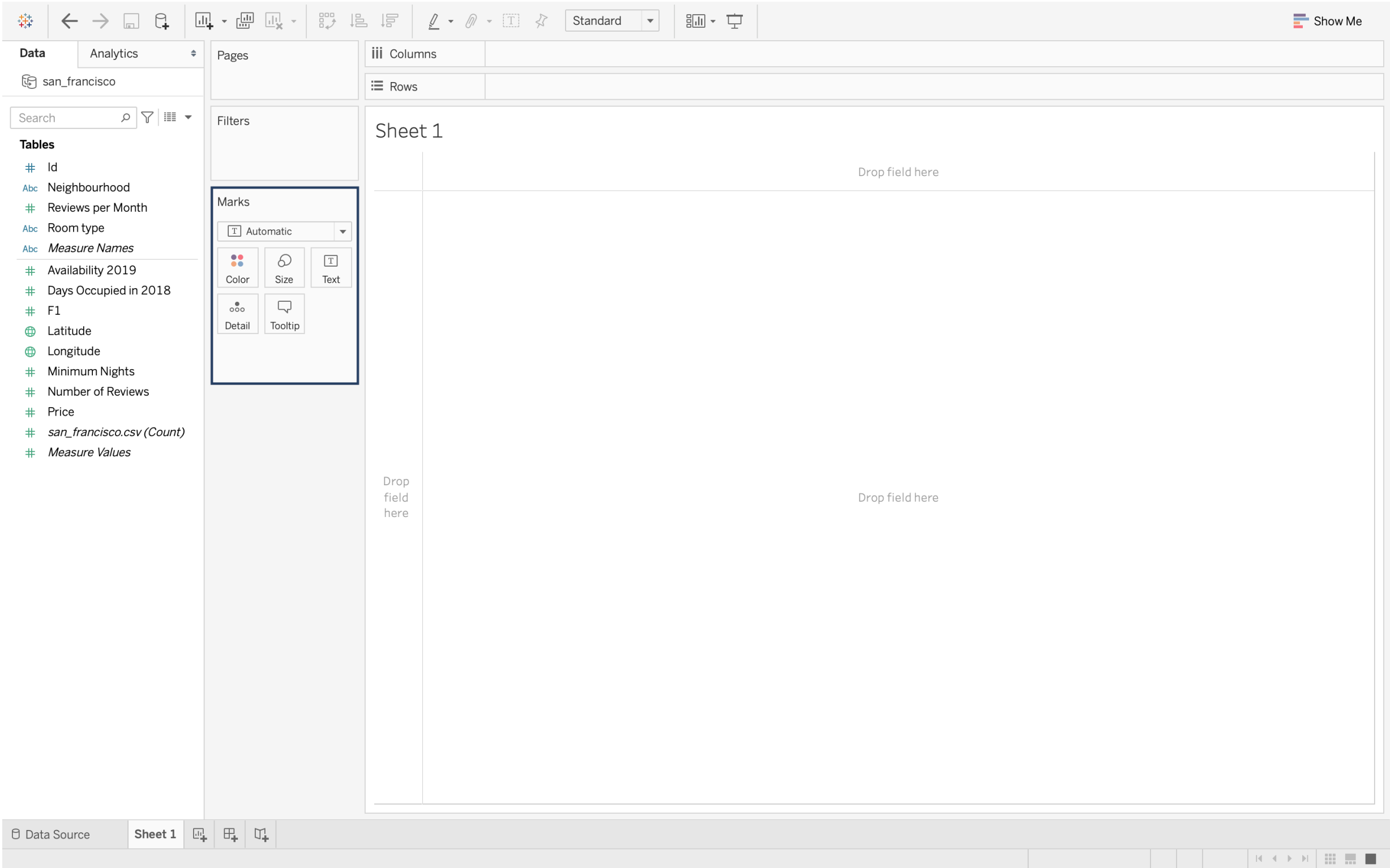


The image shows the Tableau Desktop interface. At the top is a toolbar with navigation and editing icons. Below it, the 'Data' pane on the left shows a data source named 'san_francisco' and a list of fields: 'Id', 'Neighbourhood', 'Reviews per Month', 'Room type', 'Measure Names', 'Availability 2019', 'Days Occupied in 2018', 'F1', 'Latitude', 'Longitude', 'Minimum Nights', 'Number of Reviews', 'Price', 'san_francisco.csv (Count)', and 'Measure Values'. The 'Columns' shelf at the top of the view area is empty. The 'Rows' shelf is also empty. The 'Marks' card is set to 'Automatic'. The main view area is a large rectangle labeled 'Sheet 1' with a 'Drop field here' prompt. The bottom status bar shows 'Data Source' and 'Sheet 1'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including '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 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic' and shows a vertical bar chart. The main view area is labeled 'Sheet 1' and contains a large empty space with the text 'Drop field here'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields for 'san_francisco', including '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 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic' and includes options for Color, Size, Text, Detail, and Tooltip. The main view area is labeled 'Sheet 1' and contains a large empty space with the text 'Drop field here'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including '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 'Columns' shelf is empty, and the 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic' and includes options for Color, Size, Text, Detail, and Tooltip. The main view area is labeled 'Sheet 1' and contains a large empty space with the text 'Drop field here'.



The image shows the Tableau Desktop interface. At the top is a toolbar with various icons for navigation and editing. Below the toolbar, the interface is divided into several panes. On the left is the 'Data' pane, which includes a search bar and a list of tables. The 'Tables' list contains fields such as 'Id', 'Neighbourhood', 'Reviews per Month', 'Room type', 'Availability 2019', 'Days Occupied in 2018', 'F1', 'Latitude', 'Longitude', 'Minimum Nights', 'Number of Reviews', 'Price', and 'Measure Values'. In the center-left is the 'Marks' shelf, which is currently set to 'Automatic' and contains a box with 'Color', 'Size', 'Text', 'Detail', and 'Tooltip' options. To the right of the 'Marks' shelf is the main worksheet area, which is currently blank and labeled 'Sheet 1'. The worksheet area has a grid with 'Drop field here' text in the top right and bottom right corners. The bottom status bar shows 'Data Source' and 'Sheet 1'.

Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including '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' card is currently set to 'Automatic', and a dropdown menu is open showing various mark types: Automatic, Bar, Line, Area, Square, Circle, Shape, Text, Map, Pie, Gantt Bar, Polygon, and Density. The main view area is labeled 'Sheet 1' and contains three 'Drop field here' prompts. The bottom status bar shows 'Data Source' and 'Sheet 1'.

The image shows the Tableau Desktop interface. At the top is a toolbar with navigation and editing icons. Below it is a header bar with 'Data' and 'Analytics' tabs. The left sidebar contains a 'Data Source' pane showing a table named 'san_francisco' and a list of fields. The 'Reviews per Month' field is highlighted in green. The main workspace is a large empty area with a 'Drop field here' prompt. The bottom status bar shows 'Data Source' and 'Sheet 1'.

Our business question

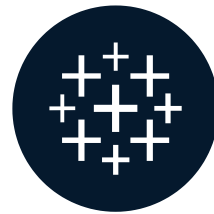
Which neighborhood and room type has the highest price in New York?

Let's practice!

INTRODUCTION TO TABLEAU

A tour of the interface

INTRODUCTION TO TABLEAU



Hadrien Lacroix

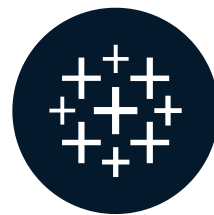
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INTRODUCTION TO TABLEAU

How to create visualizations in Tableau

INTRODUCTION TO TABLEAU



Maarten Van den Broeck
Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU