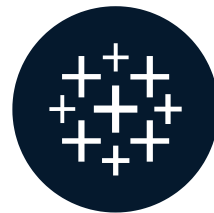


Introduction

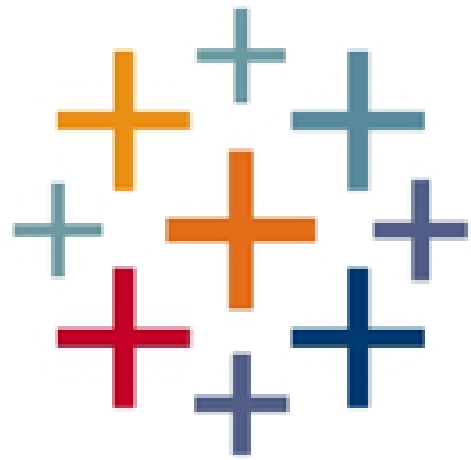
INTRODUCTION TO TABLEAU



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 for a range of users
- Advanced analytical capabilities
- Flexible
- Intuitive
- Quick and robust prototyping
- Frame (business) questions
- Import and clean data
- Analyze and visualize data
- Drive business decisions
- Present insights

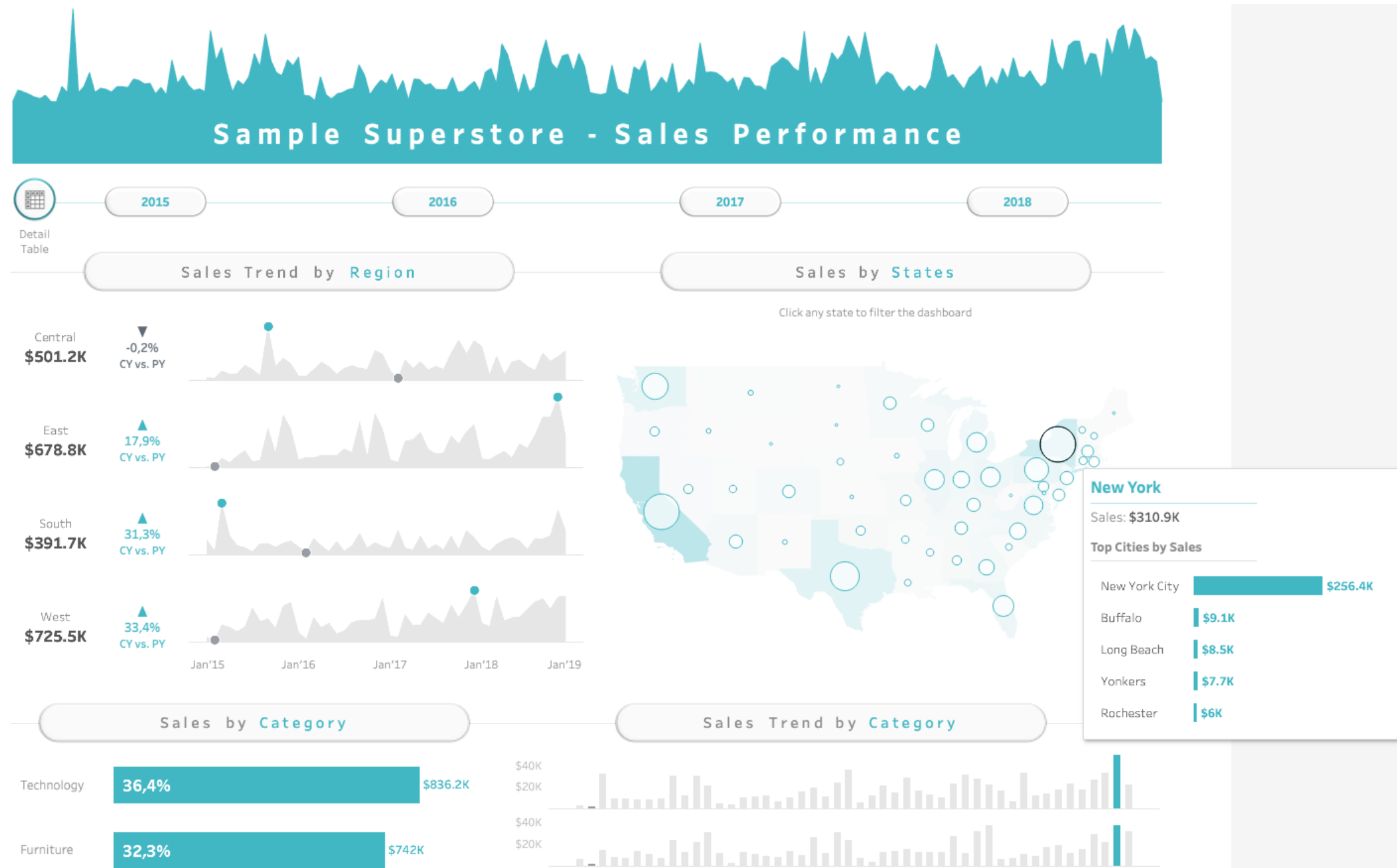


Who uses Tableau?

Roles

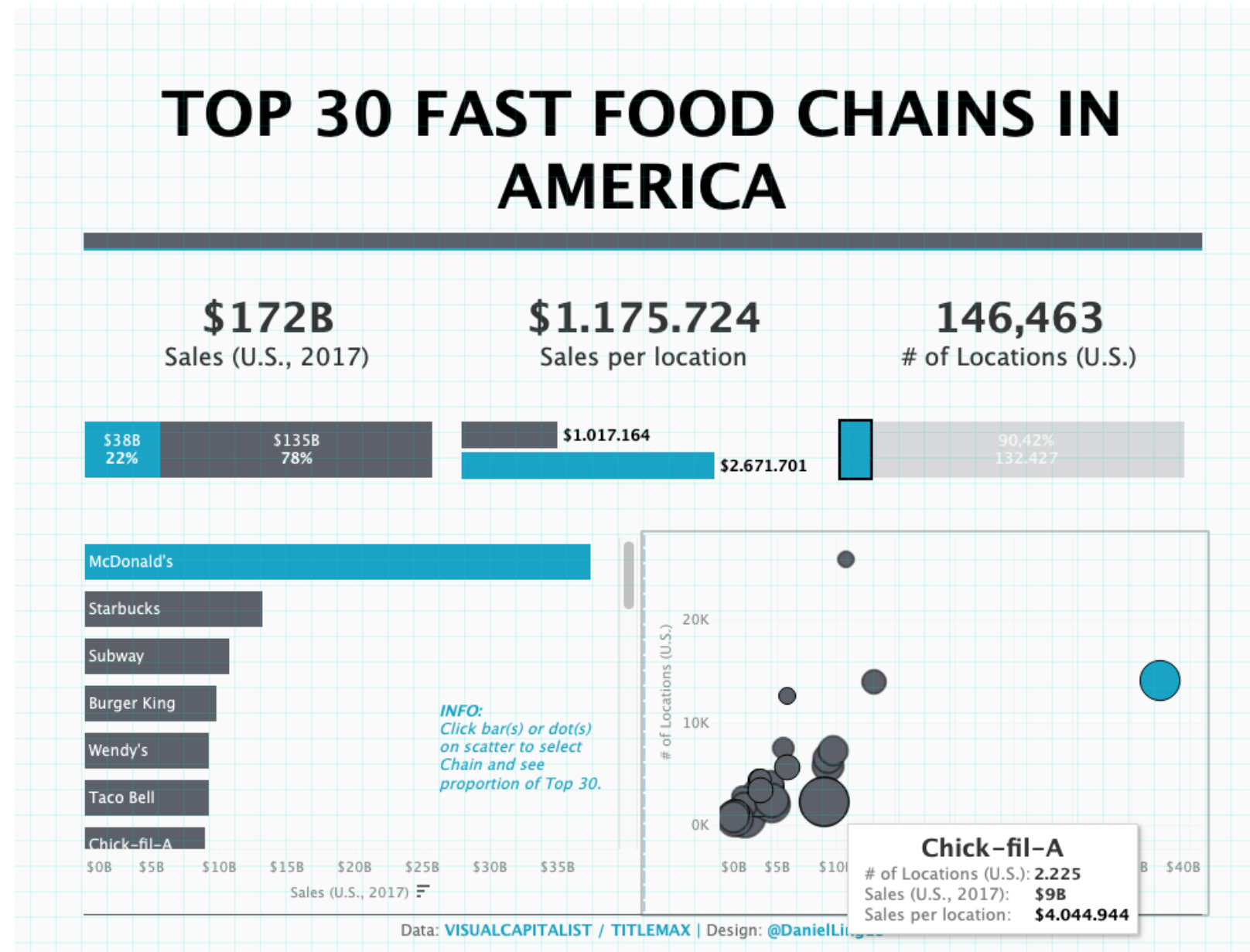
- Data analyst
- Business analyst
- Analytics consultant

Possibilities with Tableau



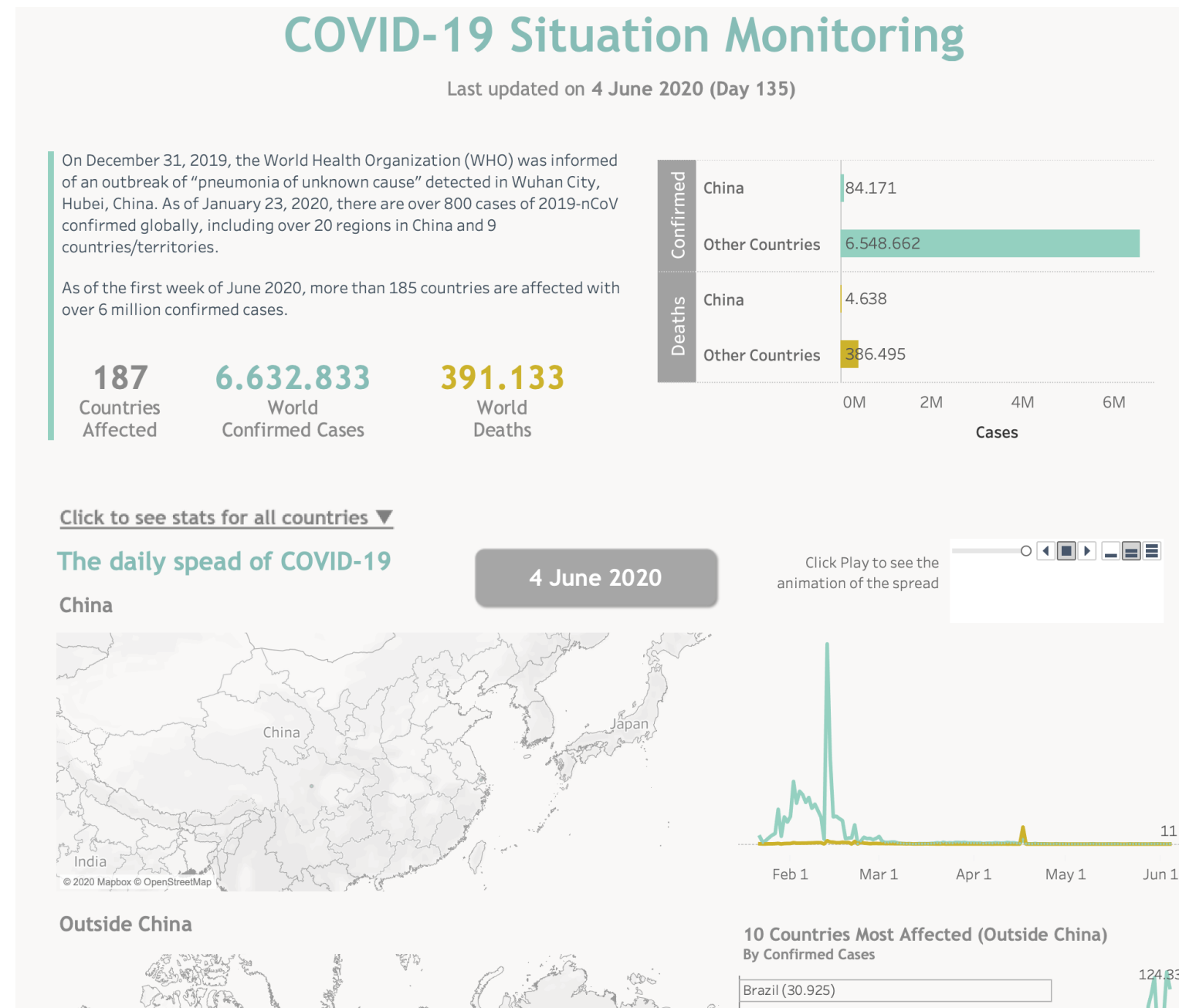
¹ Author: Pradeep Kumar G. Originally published on: Tableau Public

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 Desktop Public Edition

- Free
- All visualizations included
- Excel, csv, Google Sheets, web data
- 15 millions rows of data
- Publish locally¹ and online

¹ Since April 2024

Tableau versions

Tableau Desktop Public Edition

- Free
- All visualizations included
- Excel, csv, Google Sheets, web data
- 15 millions rows of data
- Publish locally¹ and online

Tableau Desktop

- Paid (license)
- All visualizations included
- All listed data sources
- Unlimited rows of data
- Publish locally and online

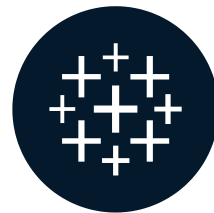
¹ Since April 2024

Let's practice!

INTRODUCTION TO TABLEAU

Connecting to data

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

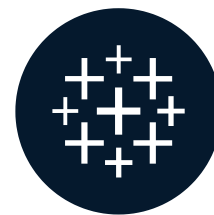
Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU

Navigating Tableau

INTRODUCTION TO TABLEAU



Maarten Van den Broeck

Content Developer at DataCamp

The image shows the Tableau Desktop interface. At the top is a toolbar with various icons for navigation, editing, and viewing. Below the toolbar is a header bar with tabs for 'Data' and 'Analytics', and a dropdown menu showing 'san_francisco'. On the left side, there is a 'Tables' pane with a search bar 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 main workspace is divided into several shelves: 'Columns', 'Rows', 'Marks', and 'Filters'. The 'Columns' shelf is empty. The 'Rows' shelf is empty. The 'Marks' shelf is set to 'Automatic'. The 'Filters' shelf is empty. The main view area is a large empty space with a light gray background and a vertical line indicating the column shelf position. 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 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

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

Drop field here

Drop field here

Drop field here

Sheet 1

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 contains 'Color', 'Size', 'Text', 'Detail', and 'Tooltip' marks. 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

Search

Tables

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- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
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- Longitude
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- # Price
- # san_francisco.csv (Count)
- # Measure Values

Columns

Rows

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

Drop field here

Drop field here

Drop field here

Sheet 1

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'. The main view area is labeled 'Sheet 1' and contains three 'Drop field here' prompts.

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 the 'san_francisco' data source, including '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 set to 'Automatic'. The main view area is labeled 'Sheet 1' and contains three 'Drop field here' prompts.

Tableau interface showing the 'Data' pane on the left with a list of fields. The 'Columns' and 'Rows' shelves are empty. The 'Marks' shelf is also empty. A context menu is open over the 'Reviews per Month' field, showing options like 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Create', 'Convert to Discrete', 'Convert to Measure', 'Change Data Type', 'Geographic Role', 'Default Properties', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The 'Convert to Measure' option is highlighted. The main view area is labeled 'Sheet 1' and contains a large empty space with a 'Drop field here' prompt.

The screenshot shows the Tableau Desktop interface. On the left, the 'Data' pane displays a list of fields from the 'san_francisco' data source. The field 'Reviews per Month' is highlighted. A context menu is open over this field, showing various actions. The 'Convert to Discrete' option is currently selected and highlighted in blue. The main workspace, labeled 'Sheet 1', is empty with a grid and 'Drop field here' prompts. The top toolbar contains various icons for navigation and visualization, and the bottom status bar shows 'Data Source' and 'Sheet 1'.

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

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' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Columns' shelf contains the field 'Neighbourhood'. The 'Rows' shelf is empty. The 'Marks' card is set to 'Automatic'. The 'Data' pane lists various 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'. The main view area is labeled 'Sheet 1' and contains the text 'Drop field here'.

The image shows the Tableau Desktop interface. At the top is a toolbar with navigation and editing icons. Below the toolbar is a header bar with tabs for 'Data' and 'Analytics', and a dropdown menu showing 'san_francisco'. On the left is a sidebar with a search bar and a list of tables under the heading 'Tables'. The tables 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'. In the center is a 'Marks' card with a dropdown menu set to 'Automatic' and six icons: 'Color', 'Size', 'Text', 'Detail', and 'Tooltip'. To the right of the 'Marks' card is a large area labeled 'Sheet 1' with a grid. The grid has a header row and a header column. The text 'Drop field here' is visible in the top-right and bottom-right cells of the grid. At the bottom is a footer bar with tabs for 'Data Source' and 'Sheet 1', and icons for adding data sources and worksheets.

←

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▾

▾

▾

Standard ▾

▾

Show Me

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

Pages

Filters

Marks

Automatic ▾

Color

Size

Text

Detail

Tooltip

Columns

iii Columns

Rows

≡ Rows

Sheet 1

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'. 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 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 under the heading 'Tables'. The tables 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'. In the center is the 'Columns' shelf, which is currently empty. To the right of the 'Columns' shelf is the 'Rows' shelf, which is also empty. Below these shelves is the 'Marks' card, which is set to 'Automatic'. The 'Marks' card has several options: 'Color', 'Size', 'Text', 'Detail', and 'Tooltip'. The main area of the interface is a large white space labeled 'Sheet 1'. It contains two faint, light gray text prompts: 'Drop field here' in the upper right and 'Drop field here' in the lower left. At the bottom of the interface is a status bar that includes the text 'Data Source' and 'Sheet 1', along with some icons for navigation and editing.

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'.

The image shows the Tableau Desktop interface. At the top is a toolbar with various icons for navigation and editing. Below the toolbar, the 'Columns' shelf contains two fields: 'San Francisco' and 'Reviews per Month'. The 'Rows' shelf contains one field: 'Price'. The 'Marks' card is set to 'Automatic' and displays a bar chart. The 'Filters' card is empty. On the left side, there is a 'Tables' list with various 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'. The main view area shows a bar chart with 'San Francisco' on the x-axis and 'Price' on the y-axis. The bars are colored by 'Reviews per Month'. The interface is in English and has a light gray theme.

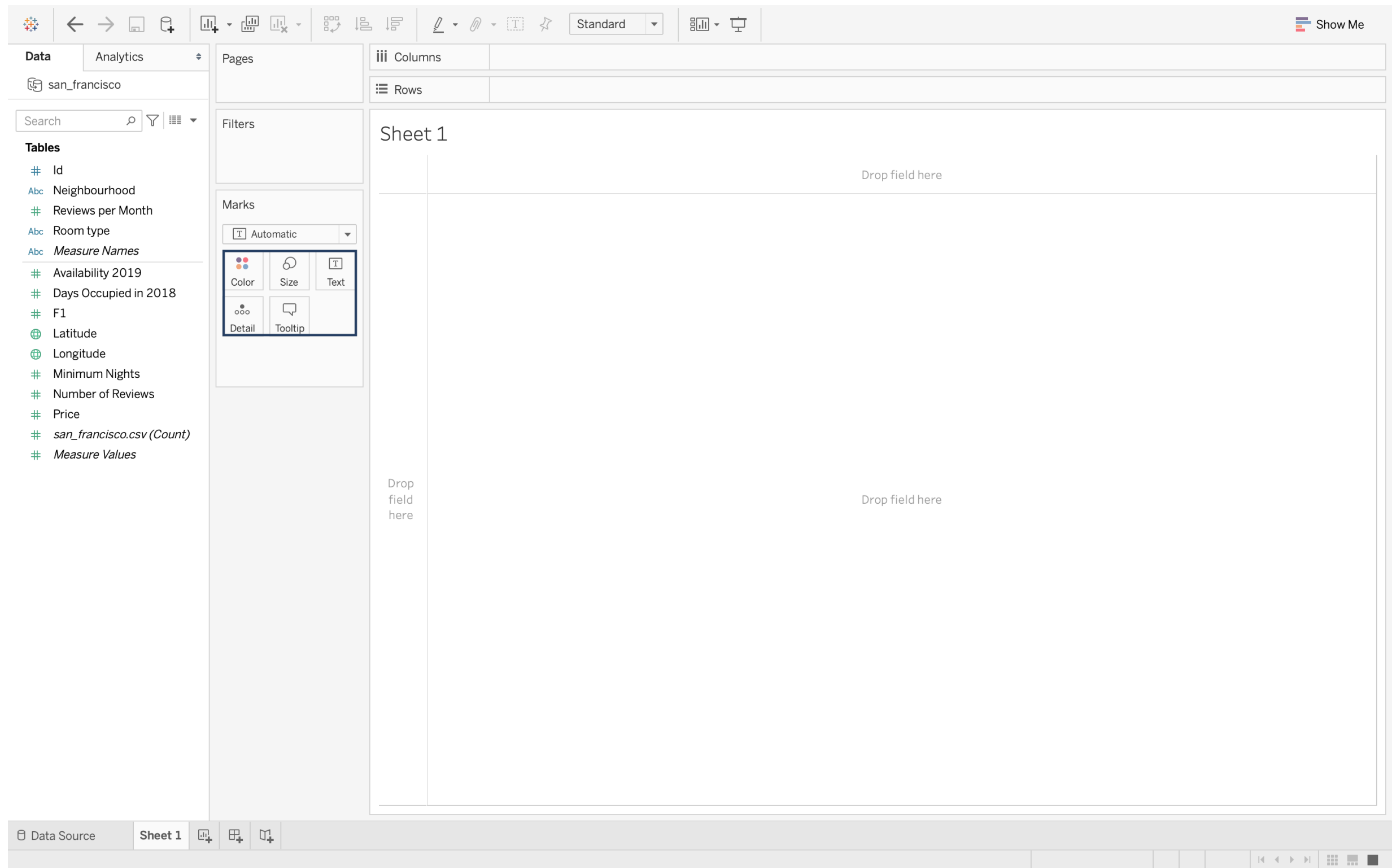


Tableau interface showing the 'Data' pane on the left, the 'Columns' and 'Rows' shelves at the top, and the 'Marks' card in the center. The 'Data' pane lists fields from the 'san_francisco' data source, including 'Id', 'Neighbourhood', 'Reviews per Month', 'Room type', 'Measure Names', 'Availability 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'.

←

→

Standard

Show Me

DataAnalytics

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

Pages

Columns

Rows

Filters

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Sheet 1

Drop field here

Drop field here

Data Source

Sheet 1

Our business question

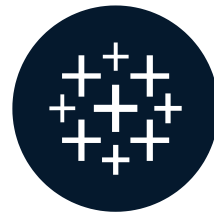
Which neighborhood and room type has the highest price in New York?

Let's practice!

INTRODUCTION TO TABLEAU

A tour of the interface

INTRODUCTION TO TABLEAU



Hadrien Lacroix

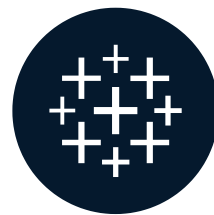
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Let's practice!

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