A Box-and-Whisker Plot and A Symbol Map w MapBox Integration.

Sleeper Ch. 29, 30

A box plot, is another effective visualization choice for illustrating distributions. It can tell you about your outliers and what their values are. It can also tell you if your data is symmetrical, how tightly your data is grouped, and if and how your data is skewed.

Start by creating a bar chart:

- Columns: Sub-Category
- Rows: Sum(Sales)

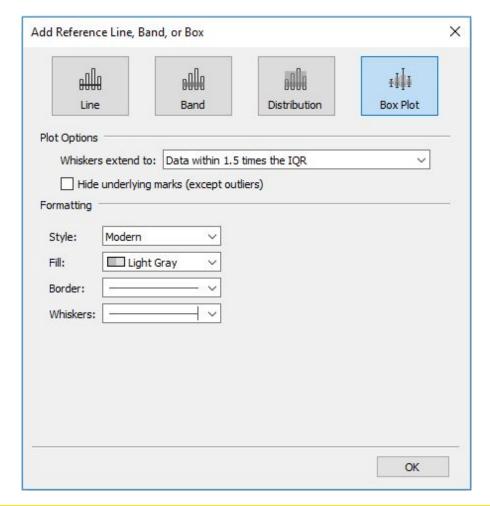
Add your distribution of choice to the Detail Marks Card - the result is a stacked bar chart.

Detail Marks Card: Month(Order Date)

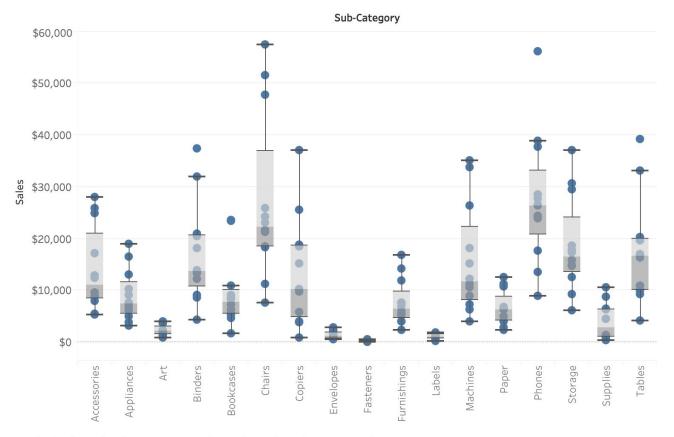
Create a dot plot:

- Marks Card Type: Circle

Right-click y-axis > **Add Reference Line** > **Box Plot** - accept the defaults (see screenshot on the next page)



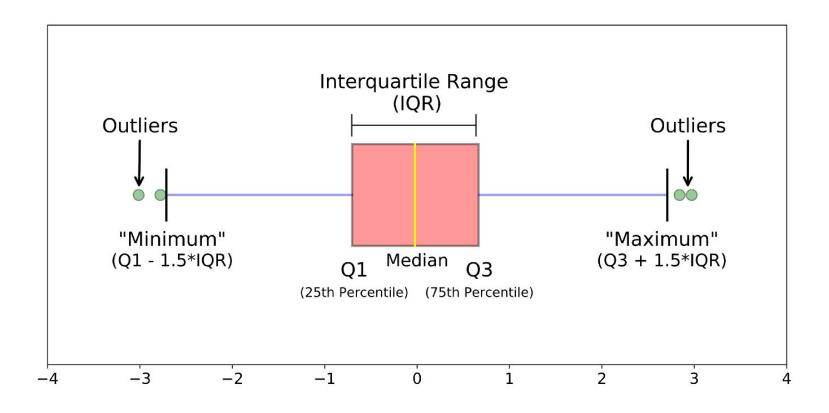
A Box-and-Whisker Plot

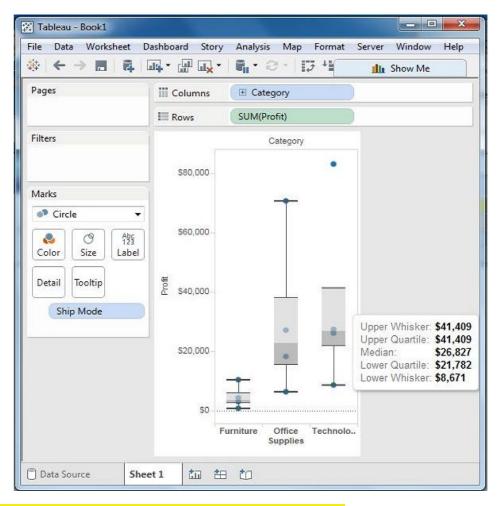


Sum of Sales for each Sub-Category. Details are shown for Order Date Month.

Understanding Boxplots

https://en.wikipedia.org/wiki/Interquartile_range





https://www.tutorialspoint.com/tableau/tableau_box_plot.htm

Symbol Maps are simply maps that have a mark displayed over a given Longitude and Latitude.

How to create a Symbol Map

Tableau recognizes your geographic fields as map-compatible if there is a globe icon next to the dimension.

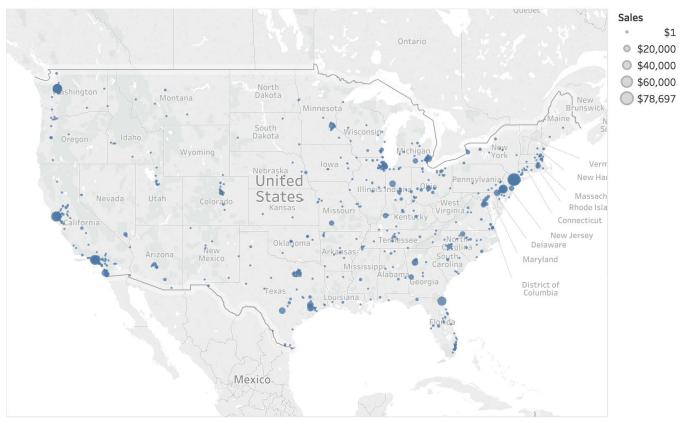
Double click on the **Postal Code** to create a map.

Size Marks Card: Sum(Sales)

Explore other shapes by choosing Card Marks Type: Shape > Shape Marks Card

Explore additional data layers at Map > Map Layers > Data Layer

A Symbol Map



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Sales. Details are shown for Country and Postal Code.

https://learning.oreilly.com/library/view/practical-tableau/9781491977309/ch30.html



Mapbox is an American provider of **custom online maps** for websites and applications such as *Foursquare, Lonely Planet, the Financial Times, The Weather Channel, Instacart Inc. and Snapchat*.

Founded: 2010. Headquarters: San Francisco, CA

<u>Marketing Video</u>

<u>Introduction to Mapbox Studio Video</u>

Mapbox on Wikipedia

Tableau / Mapbox Integration

Mapbox Documentation:

How to Use Custom Mapbox Styles in Tableau

<u>How to Create a Custom Style in Mapbox</u>

<u>Assign a geographic role to a field in Tableau</u>

In order to create a map view, assign a geographic role to a field in Tableau.

A geographic role associates each value in a field with a latitude and longitude value. When you assign a geographic role to a field, Tableau assigns **latitude** and **longitude** values **to each location in your data** based on data that is already built in to the Tableau map server.