Assignment 3

Introducing Data Visualization Tool

+ableau®

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Agenda

1. What is Tableau?
2. Tableau products
3. What is Tableau Public?
4. Download & install Tableau Public
5. Creating our first dashboard on Tableau Public
6. Publish our first dashboard to a Tableau Public account
7. Pros & Cons

What is Tableau?

Tableau is a data visualization tool where we can easily create charts and graphs by double clicking, dragging and dropping fields

Tableau products

1. **Tableau Desktop:** "The gold standard"

2. **Tableau Prep:** Prepare the data for analysis

3. **Tableau Online:** Takes the dashboards to the cloud

4. **Tableau Server:** Data sharing s/w for enterprises

Tableau products

$70 USD/month
for a Creator license

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~5.5k INR/month

What is Tableau Public?

Tableau Public is the free version of Tableau Desktop

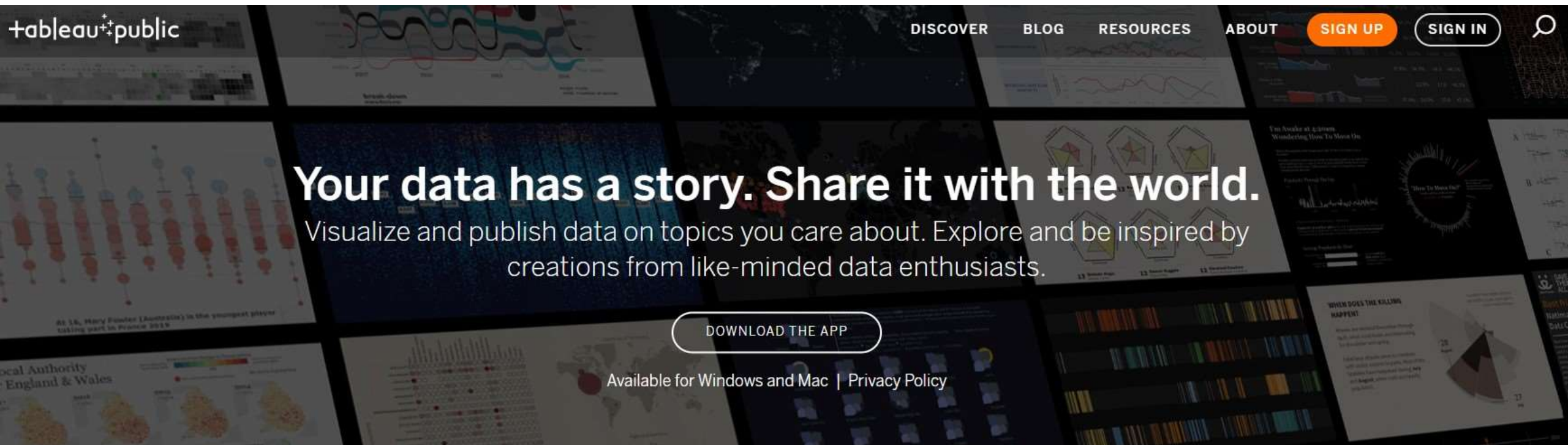*"It's a free platform for anyone to create, share, and discover visualizations using public data."*

\- Tableau.com

Download & install Tableau Public

www.tableau.com

⌐→ Products

⌐→ Tableau Public

Tableau Public - Book1

File   Data   Help

Connect

To a File

Microsoft Excel

Text file

JSON file

Microsoft Access

PDF file

Spatial file

Statistical file

To a Server

OData

More...

Save locally. Work with big data.
Connect to more data sources.

Open

Open from Tableau Public

Discover

How-to Videos

Overview

Intro to the Interface

Chart Types

More how-to videos...

VIZ
OF THE
DAY

Explore viz of the day
→

Blog - Read latest post

Sample Data Sets

Live Training

Current Status

Live Demo
Switching to Tableau Public

Source: freepik.com

Extracts from s/w demo

Tableau Public - Book1

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More...

The left panel is for importing the data which can be in any of the given format. Options are limited since this is not the premium version of Tableau. We can browse the file and upload here in no time.

Extracts from s/w demo

Tableau Public - Book1

File   Data   Window   Help

World_Bank_CO2

Connections   Add

World_Bank_CO2
Microsoft Excel

Sheets

☐ Use Data Interpreter

Data Interpreter might be able to
clean your Microsoft Excel
workbook.

▦ About
▦ CO2 (kt) for Split
▦ CO2 (kt) Pivoted
▦ CO2 (kt) RAW DATA
▦ CO2 Data Cleaned
▦ CO2 Per Capita (Pivoted)
▦ CO2 Per Capita RAW DATA
▦ Metadata - Countries

⮒ New Union

Here "World_Bank_CO2" is the excel
sheet which is imported to Tableau
for demo. The list of sheets within
this file is also displayed for the user
to drag and drop on the mid section
of screen, which is the work area.

Drag tables here

Extracts from s/w demo

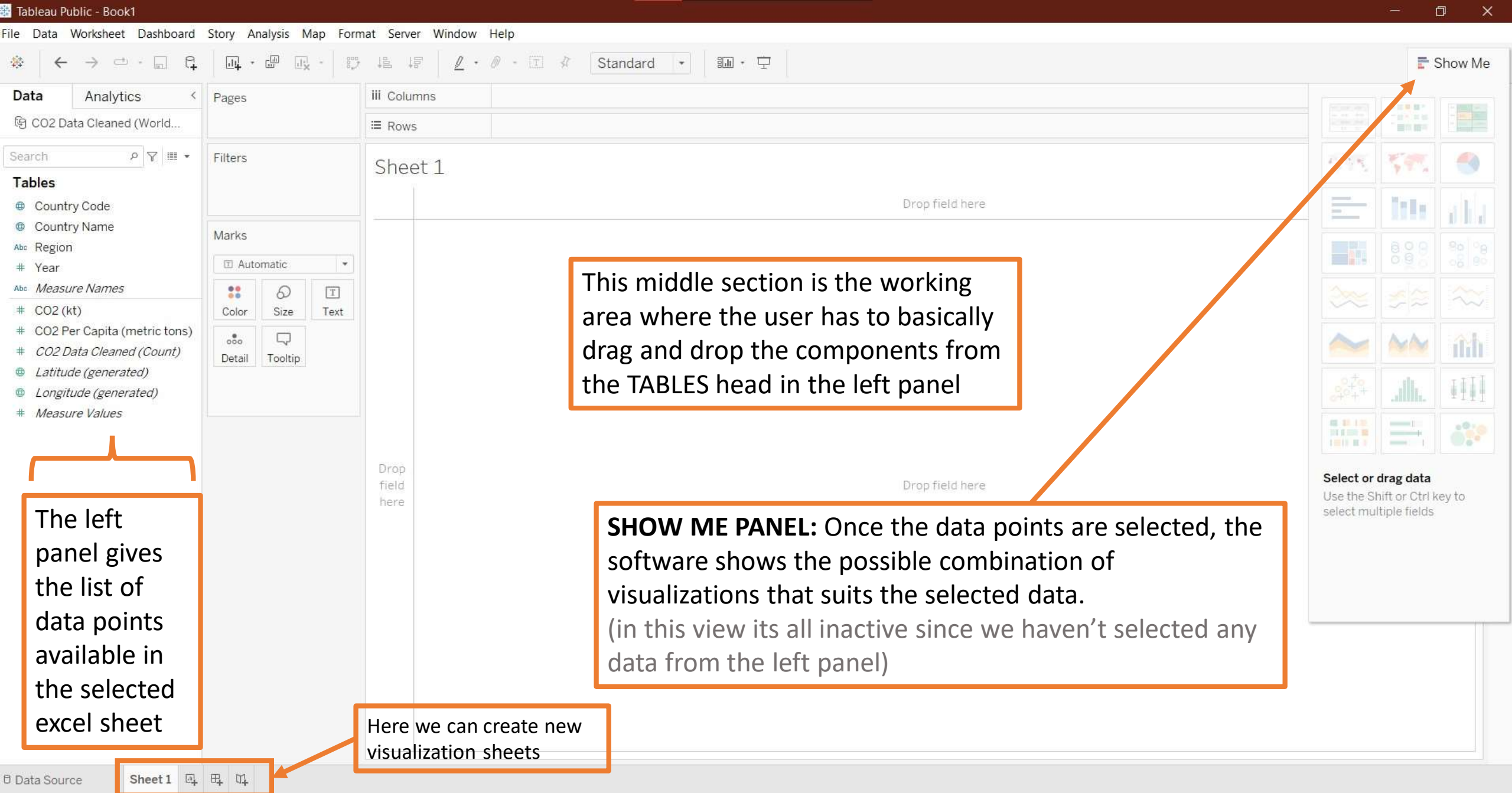We can preview the data in each sheet to reverify the details before we start working on the data viz.

Extracts from s/w demo

This middle section is the working area where the user has to basically drag and drop the components from the TABLES head in the left panel

SHOW ME PANEL: Once the data points are selected, the software shows the possible combination of visualizations that suits the selected data.
(in this view its all inactive since we haven't selected any data from the left panel)
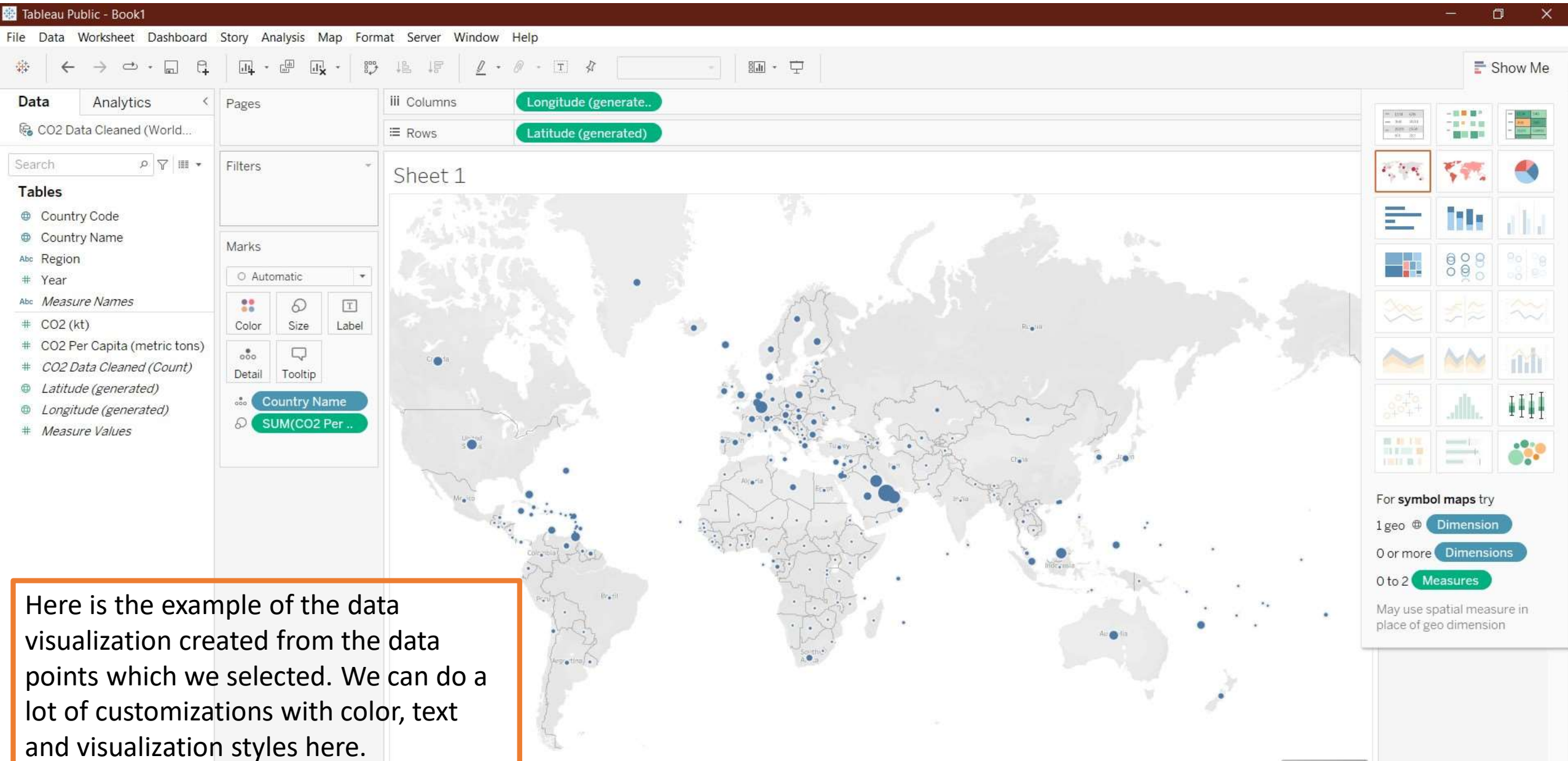
The left panel gives the list of data points available in the selected excel sheet

Here we can create new visualization sheets

Extracts from s/w demo

SHOW ME PANEL:- Here is the activated view of the show me panel when we selected two data points form the excel sheet content. The software is now intuitively showing which all visualizations are suited for these selected data. Now the user can do some trial and error to land at the one which served the purpose.

Shots from s/w demo

Here is the example of the data visualization created from the data points which we selected. We can do a lot of customizations with color, text and visualization styles here.

Extracts from s/w demo

Here we combined two visualizations and created a dashboard. There is more customization and interactivity options available here to explore. Once the dashboard is ready, we have to save this as "Tableau Public File" (Shortcut: Ctrl+S)

This will be a public file which can be viewed by anyone from the users Tableau Public profile. This can then be shared to social media, or can copy embed code to export this to other platforms

Pros & Cons

Pros

1. It's free
2. Impressive visualization
3. Ease of use
4. Mobile-friendliness
5. Thriving community forum

Cons

1. Security concerns
2. Limited data source connections
3. No local saving
4. No automation
5. Data limits
6. Limited support

Takeaway

- Tableau offers powerful data visualization capabilities and high performance that's necessary for processing complex data. Great tool for beginners.

- It is designed for those users who are looking to share data and collaborate publicly.

- Not suitable for those users who are handling confidential or sensitive data.