Introduction to business intelligence.

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BUSINESS INTELLIGENCE

- **Business Intelligence** is an application of data analysis that aids companies in making data-driven decisions.

- Using **Business Intelligence** technologies, we can provide insights into the **performance of a business** in the past and the present as well as **make predictions or recommendations for the future**.

- A key difference between Business Intelligence and data analysis is those insights are meant to be actionable and geared towards helping a business make decisions.

BI TOOLS

- Business Intelligence tools are designed to make sense of the huge quantities of data that organizations accumulate over time. The BI tools analyze this information and present it as actionable information that can guide decision making.
- Business Intelligence software makes up a large heterogeneous category of software. Not all tools in the category can be meaningfully compared to each other.
- There are several types of BI tools of which the most substantive are the *Full-Stack Business Intelligence Tools* and *Data Visualization Tools*.

EXAMPLES OF BI TOOLS

- Some examples:
  a. Tableau
  b. Power BI
  c. SAP Business Intelligence
  d. Domo
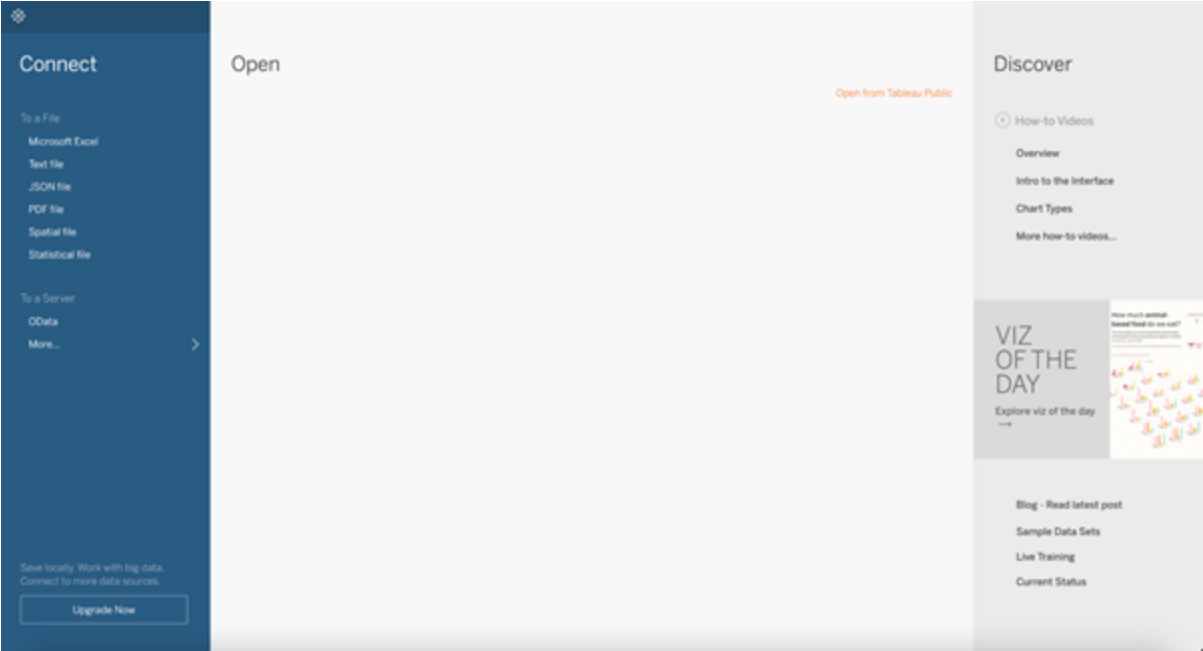 e. IBM cognos analytics
  f. Qliksense

KPI/METRICS

- A **metric** is a **quantifiable measure** that provides us with information about how well a company is doing at achieving its business objectives.
- Since **companies can only improve the things they measure**, it is a crucial part of an analyst's job to use the most appropriate metrics.
- Many companies like to use the term KPI (Key Performance Indicator) interchangeably with metrics.
- An example of a metric is the **amount of money spent per sale** or the percent of customers that buy a product out of all customers visiting the site.
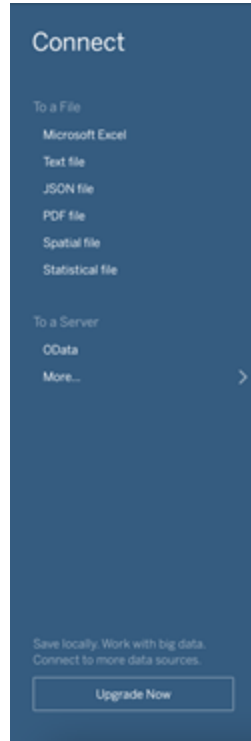
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Tableau interface

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MAIN PANEL

IMPORTING FILES

- To import files.

Connect

To a File

Microsoft Excel

Text file

JSON file

PDF file

Spatial file

Statistical file

To a Server

OData

More...

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

Upgrade Now

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LOADED FILES IN TABLEAU

finalMergedFile.csv está formado por 1 tabla. ⓘ   ✕

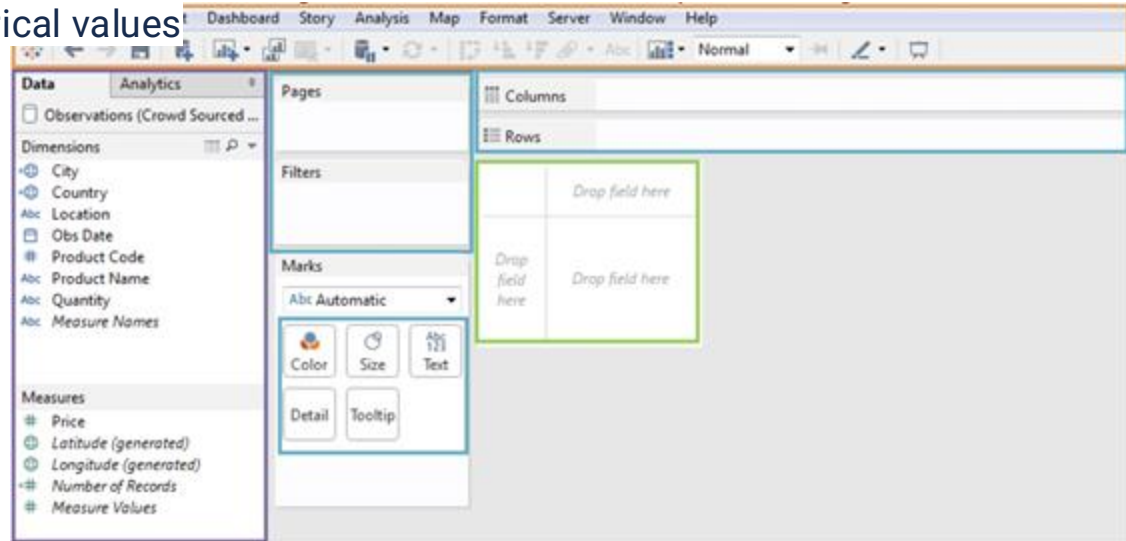finalMergedFile.csv

SHEETS, DASHBOARDS AND STORIES

FILTERS

Filtros

TABLEAU DATA TYPES

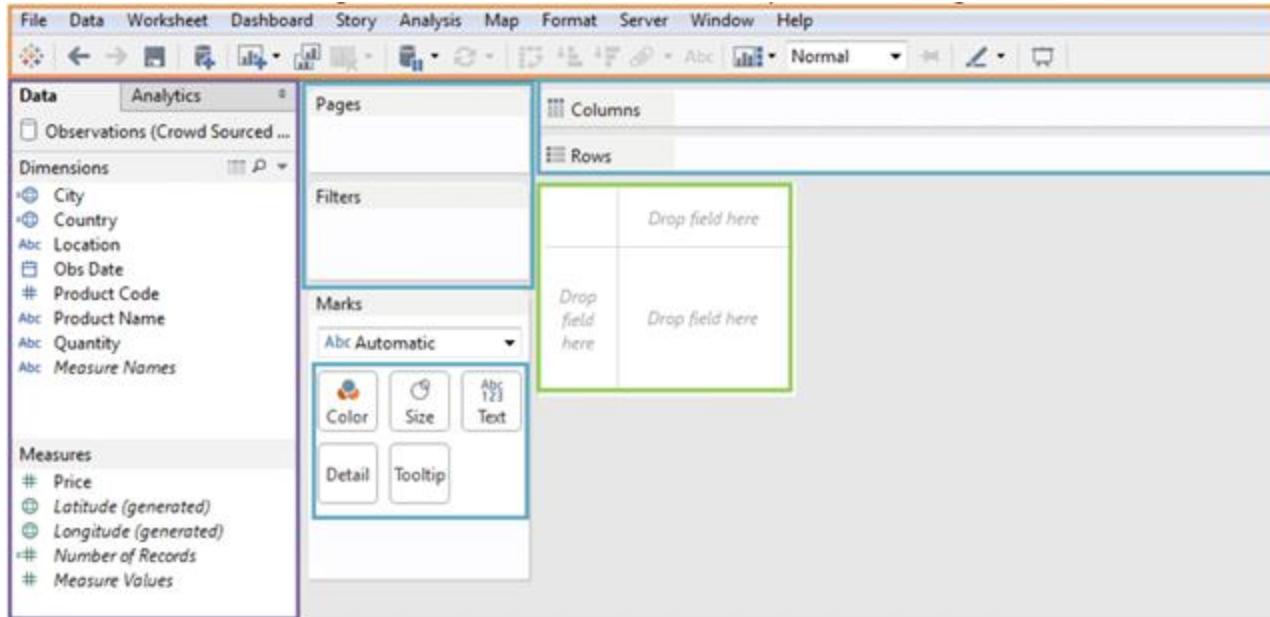| Client	Id,Visitor	Id,Visit	Id,Process	Step,Date	Time,Clnt	Tenure	Yr,Clnt	Tenure 1	Mnth,Clnt	Age,Gendr,Num	Accts,Bal,Call
finalMergedFile...	finalMergedFile.csv	finalMergedFile...	finalMergedFile.csv	finalMergedFile.csv	finalMergedFile.csv	finalMergedFile.csv	finalMergedFile...	finalMergedFile.csv	finalMergedFile.csv	finalMergedFile.csv	finalMergedFile.cs
4.167.815.67	72312830402.74	65595138961	223054.confirm....	nulo	nulo	nulo	nulo	nulo	nulo	nulo	nulo

DATA WINDOW

- Fields are split into:
    - Dimensions: categorical values, splittable,
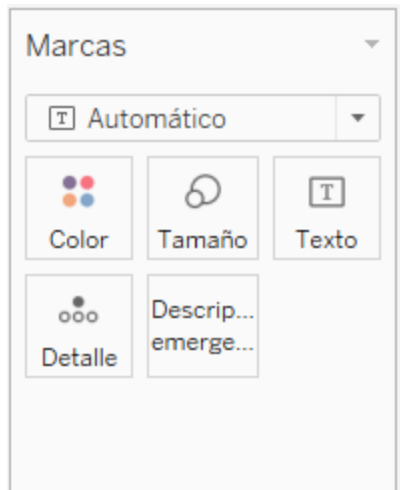   - Measures: numerical values
    - Geographicals

SHELVES: They allow you to control the display of a graph
- CANVAS
- TOOLBAR: It contains the columns to be displayed in the graph.

MARKS

- They allow you to control the display of a graph:
  - Color
  - Size
  - Text…

- They also allow you to add additional features.

FILTERS: Drag and drop the variable you want to filter to the pane: "Filters"

- NOTES: Right click on an empty espace on the canvas to add a note.
- TITLES: Right click on the canvas name.
- COLOR CODING TABS: Right click on the tab name and select the color

SHOW ME TAB

- On the top right, you should see the "Show me" tab which allows you to Select the type of visualization you want.

- The dimensions and measurements that you have in the canvas determine the available plots.

- It also tell you what you need in order to build the visualization:
    - Dimensions
    - Measurements

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SCATTER PLOTS

- Drag and drop the variable you want to be displayed on the 'y' axis in the "Columns" toolbar.

- Drag and drop the variable you want to be displayed on the 'X' axis in the "Rows" toolbar.

- Go to the menu and select Analysis and uncheck "Aggregate Measures"

ANALYTICS TAB

● On the "Data panel" there is another tab called "Analytics" which contains options to add trend lines.