Power BI workshop:

Hi everyone!

On the following workshop, we are going to show you how to use this great tool for data visualizations.

What's Power BI ?

It's a group of services, including apps and connectors that allow any user to create any source of data into coherent and interactive visualizations. This great tool allows you to take a data sheet in excel or any other data storage service (cloud base data warehouse) and turn it into a visualization.

It's simple, intuitive and allows real time analytics. So, anyone can use it as a personal report tool and decision engine behind group projects.

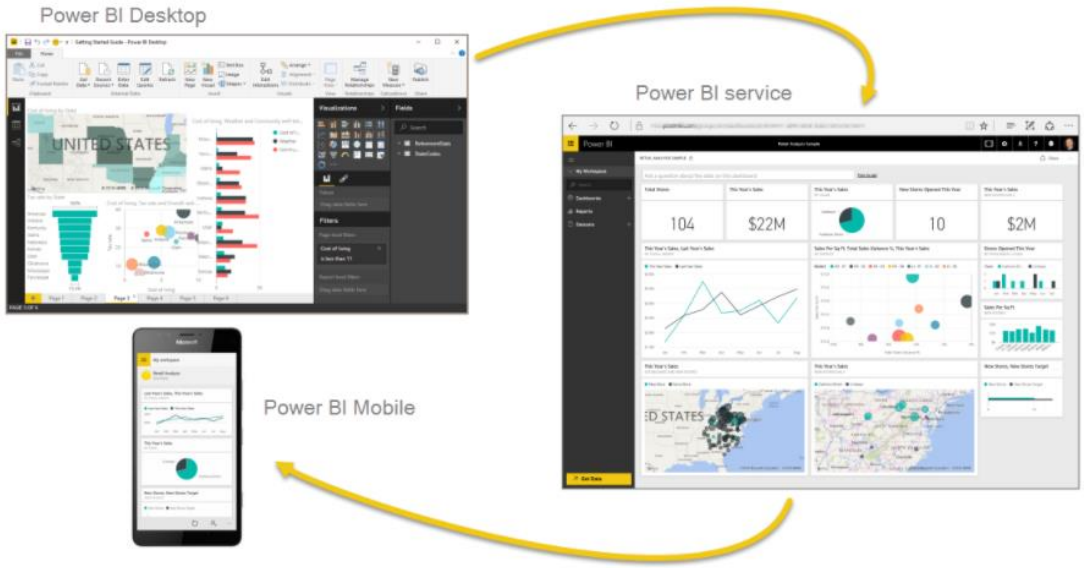
Parts of Power BI. -

Our tool consists of mainly three parts.

1.- Power BI Desktop

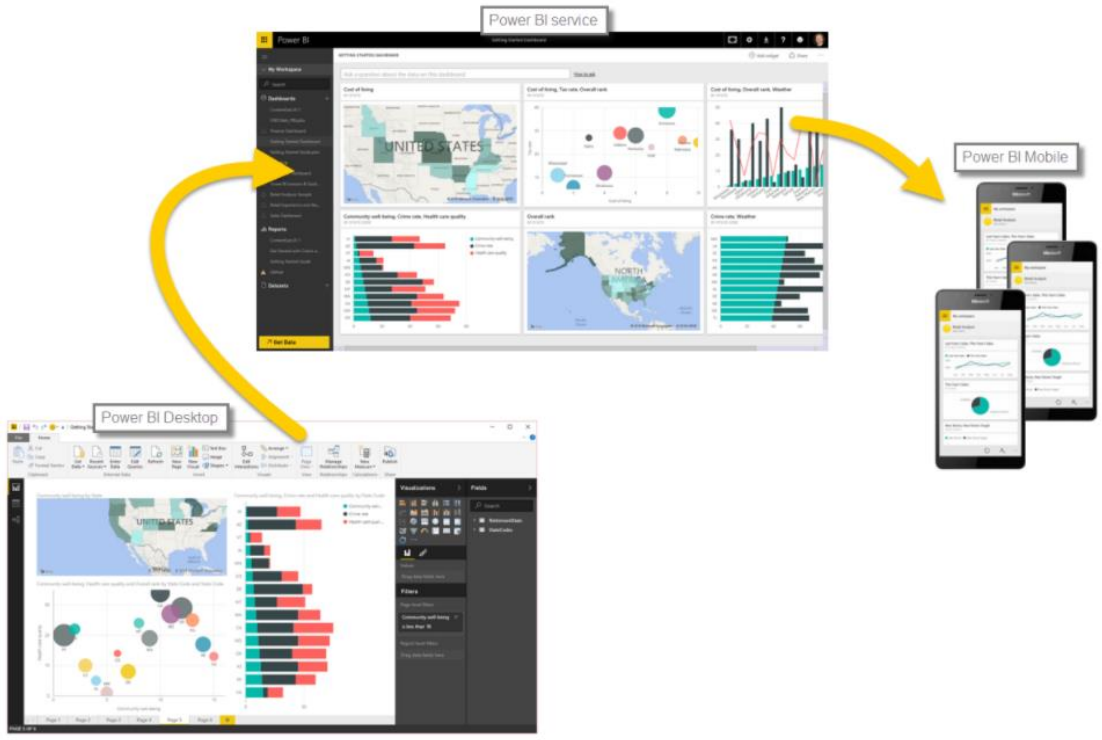
2.- Power BI Service

3.- Mobile



So…. in what order do they go? Relax, will discuss these elements as we move forward.

Usually the workflow of Power BI desktop starts with **Power BI Desktop**, where a report is created. Afterwards the report is published by Power BI service and then shared so people can use it through their mobile apps. Keep in mind that Power BI is a vast working tool. Thus, we'll covering the main parts of its use.



How to start!

Step 1.-

Let download Power BI to our desktops. Log into

https://powerbi.microsoft.com/en-us/

Step 2.-

Sign in. It's free if you use your school or work account. Just go to the link below and click on the Download for free button.

https://powerbi.microsoft.com/en-us/get-started/

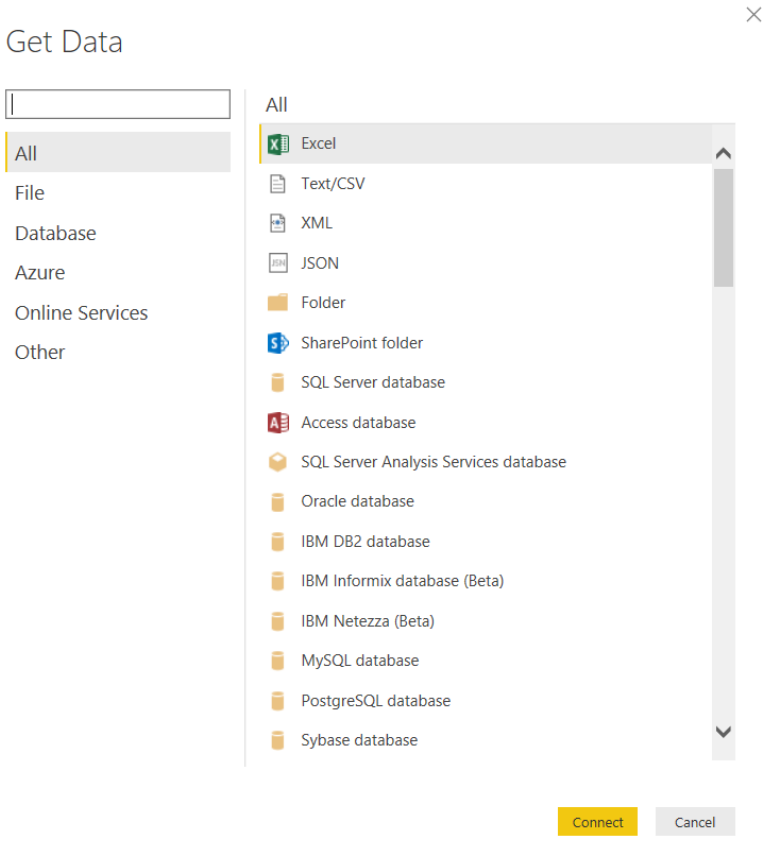
Power BI will ask you for certain general information as to access their services. Just insert it and you'll be ready to go. Since it's a free version, you can use any data set that contains up to 1gb.

Step 3.-

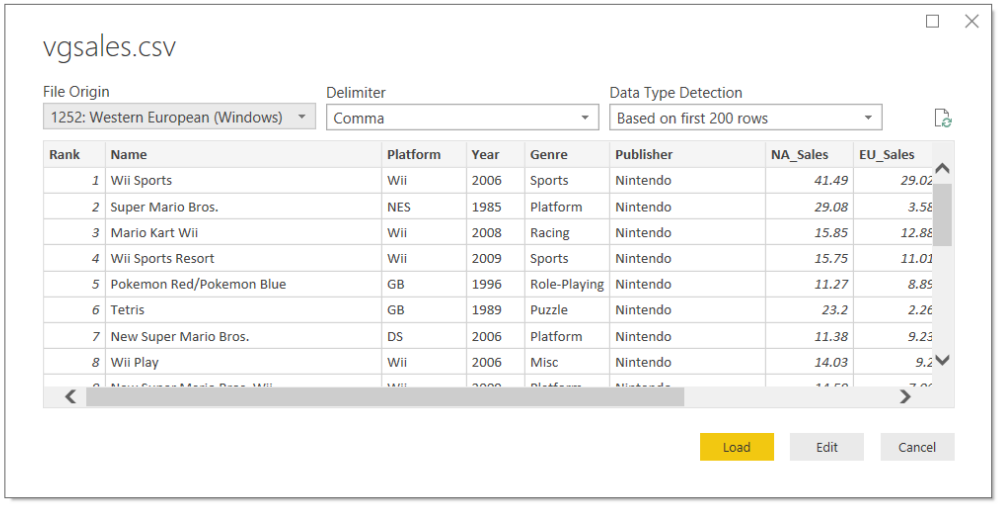
Bring data into Power BI Desktop, and create a report. (*I'll give you the data set myself).*

To do this, you'll open a power BI desktop sheet and you'll extract the data set that I provided you with. Just open **a new file** and a new window will open. On your left, you'll see the **get data** option, click on that one.

Once you do that, you'll see this screen.



You can go to the folder where your data base is stored and import it. In this case, I'll be a csv file.

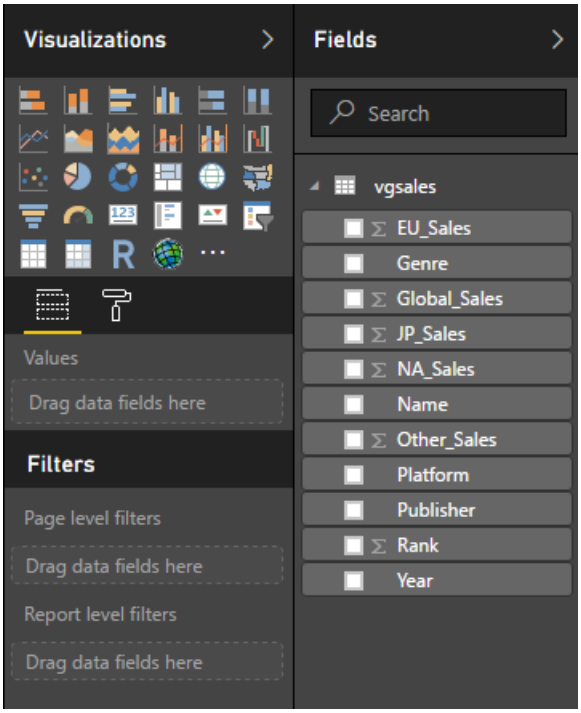


Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales
1	Wii Sports	Wii	2006	Sports	Nintendo	41.49	29.02
2	Super Mario Bros.	NES	1985	Platform	Nintendo	29.08	3.58
3	Mario Kart Wii	Wii	2008	Racing	Nintendo	15.85	12.88
4	Wii Sports Resort	Wii	2009	Sports	Nintendo	15.75	11.01
5	Pokemon Red/Pokemon Blue	GB	1996	Role-Playing	Nintendo	11.27	8.89
6	Tetris	GB	1989	Puzzle	Nintendo	23.2	2.26
7	New Super Mario Bros.	DS	2006	Platform	Nintendo	11.38	9.23
8	Wii Play	Wii	2006	Misc	Nintendo	14.03	9.2

You'll see something like this, which allows you to check if the tables of your data set are being uploaded properly. Once its loaded we can start creating our dashboard.

Step 4.-

On your right side, you'll see a small panel, such as this:



We'll use this too fields to manage our visualizations. We'll start by creating a title. You can do this by using the icon text box at the top of the screen.

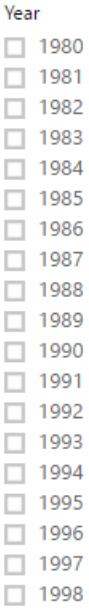
It would look something like this.

DASHBOARD

I wanted to call it video games dashboard. So, I inserted a small video games image at the left.

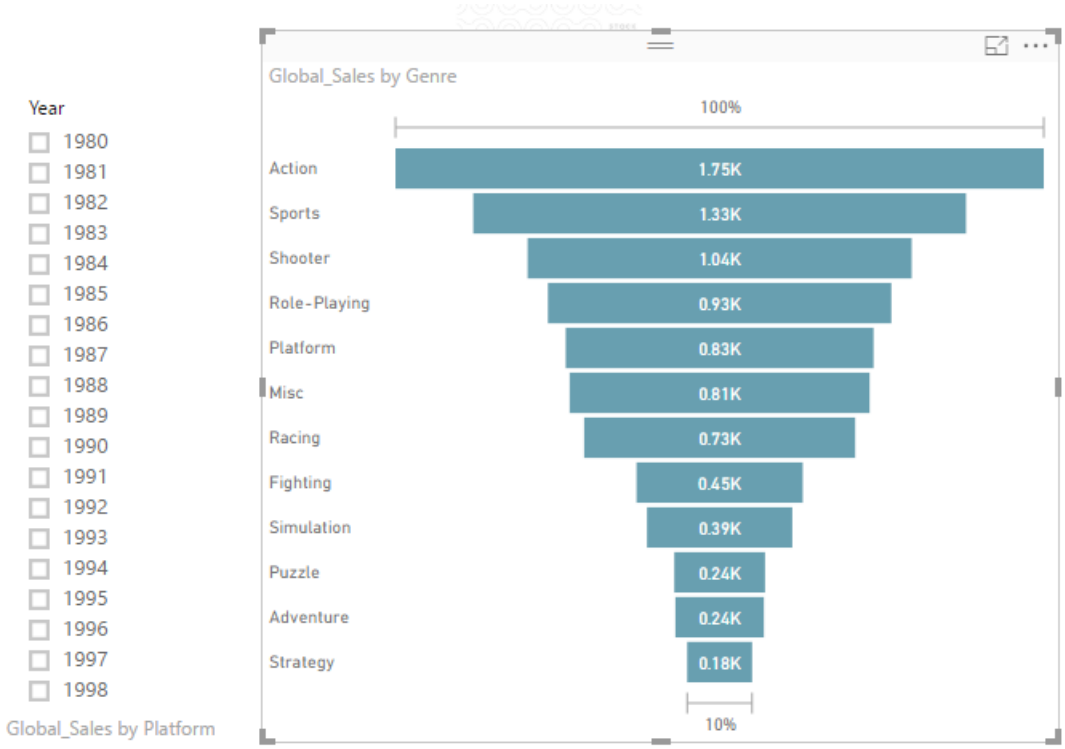
Step 5.-

We are going to use the panel on our right to start shaping our dashboard. On ***fields ,*** select the year column. When published this, will allows to filter the information by year, making it possible to focus on specific information.



Step 6.-

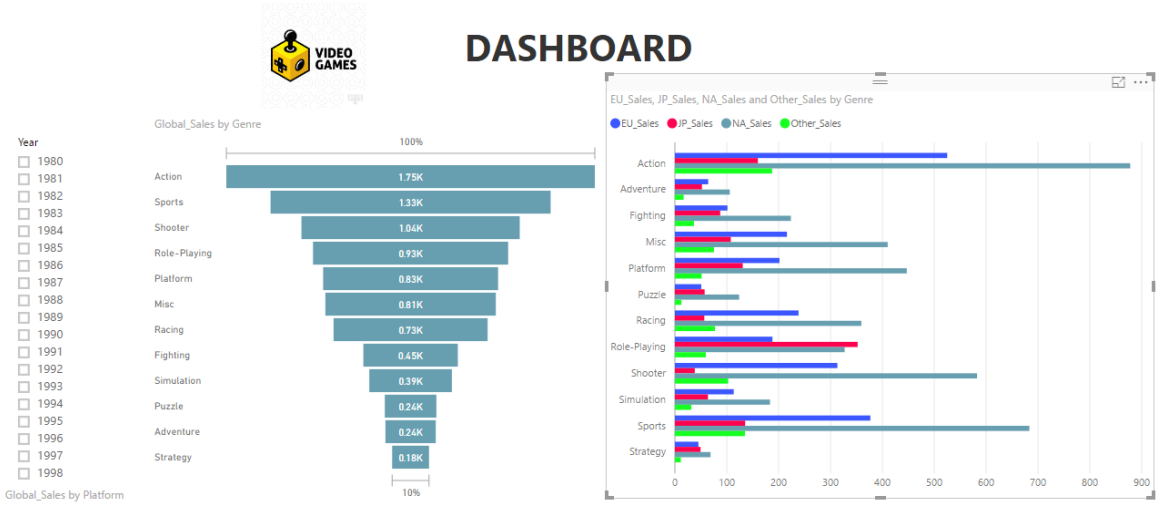
Select the global sales column and then organize it by genre. By doing so, you'll see the amount of money generated by each specific genre. It would look something like this.



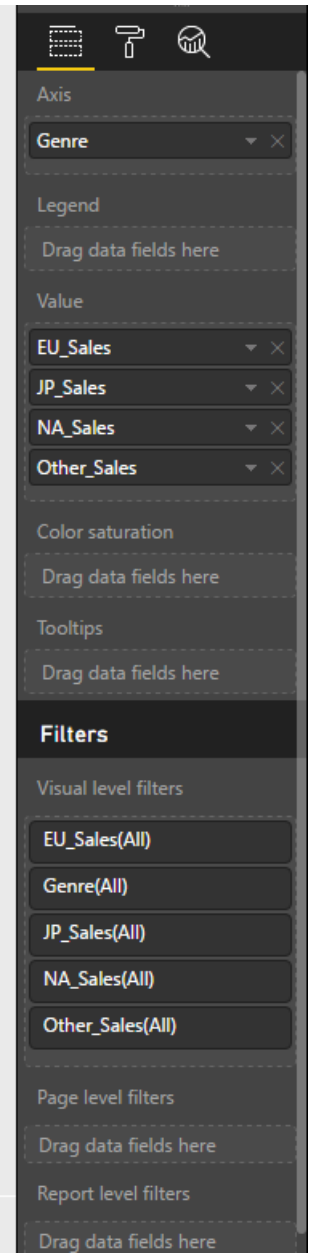
Take in count that we used a funnel tool to make this chart be presented in this way. The funnel option can be found on the visualization side of your right. You can use other types, this is just my personal favorite one.

Step 7.-

Now, we are going to create a clustered bar chart that will show the amount of sales by region. Take in mind that you can modify the way this chart looks like using the axis options that will be presented below the visualization charts. For this dashboard, I'll be presented in the following way.

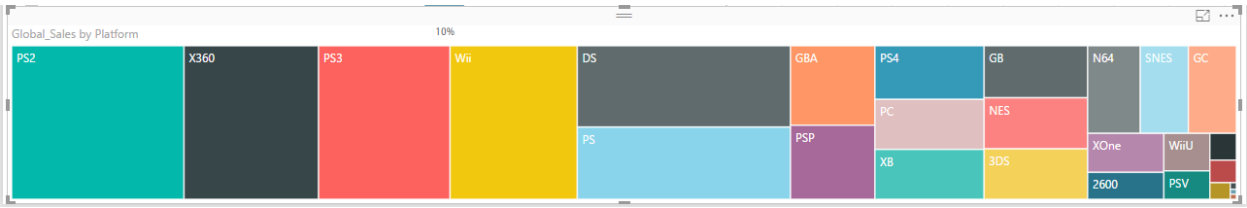


You can play with the color of this chart and how the info is presented by changing the axis settings on the following screen. In value you can select the specific sales that are going to be shown. And next to it you can change the colors of the bars.



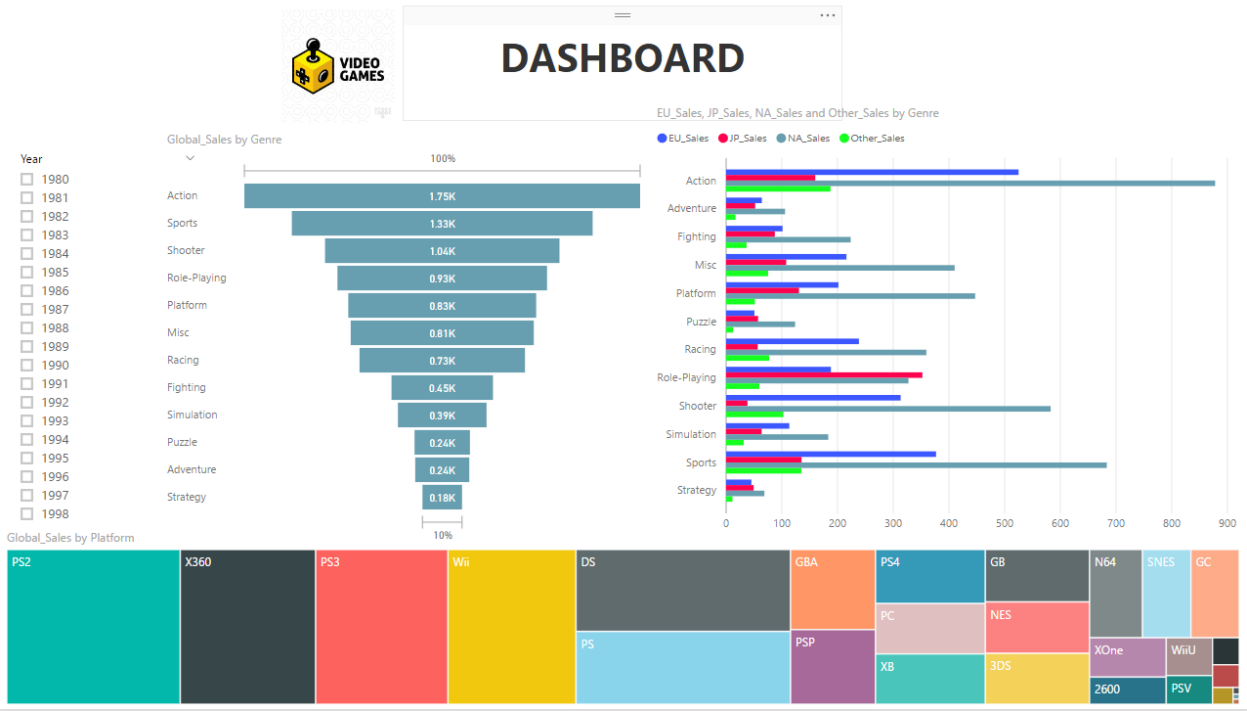
Step 8.-

We'll create global sales by treemap visualization. It'll go at the bottom of the dashboard. This kind of visualization is used to have a clear image of the importance of the volume of sales per type in a simple and clear manner. Using the visualizations options, we'll select the platform visualization type and insert it at the bottom, selecting the global sales at the right.



Here you can note which consoles are the most important one from the global sales.

The Final result will look something like this !



Step 9.-

Once we have finish creating our dashboard, we can publish it and send it other people to analyze the information you have taken. To publish your dashboard / visualizations you can simply hit the publish button on the top of the home panel. Power BI will ask you to input your school/work e-mail as to gain authorization. As Power BI is not a default app for any school you'll have to ask the IT services or your school or work to grant you the permission to publish. I already did so, I'll show you how a interactive dashboard looks like.