

POWER BI User Guideline for Beginners

Version 1.1

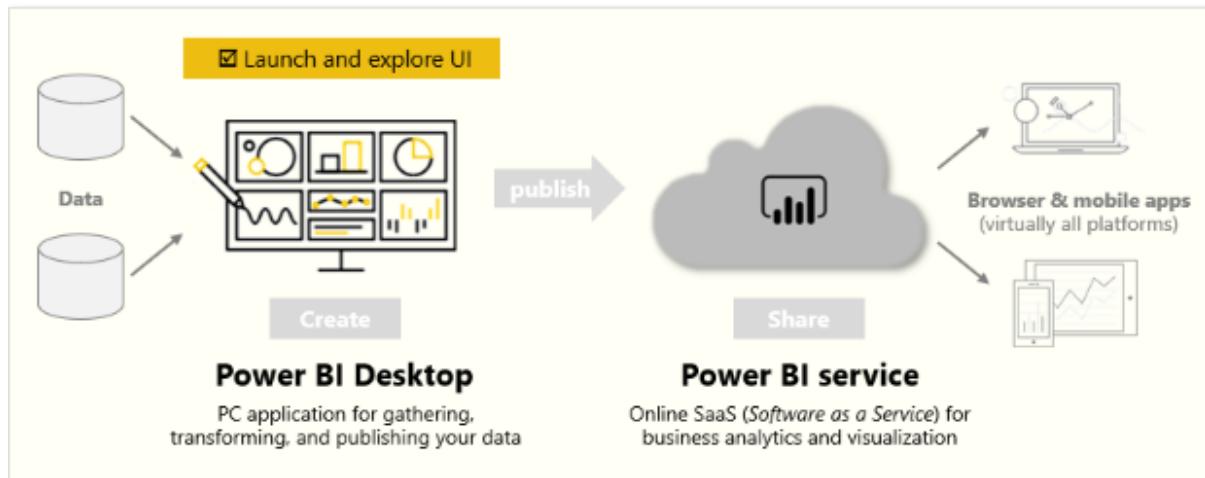
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I. INTRODUCTION

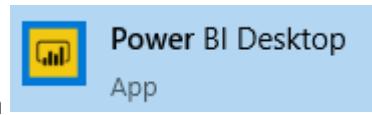
1. WHAT CAN I DO WITH POWER BI?

- Power BI is a business analytics solution that lets you visualize your data and share insights across your organization or embed them in your app or website. Connect to hundreds of data sources and bring your data to life with live dashboards and reports. (ref <https://powerbi.microsoft.com/en-us/what-is-power-bi/>)
- Power BI Desktop is a free application for PCs that lets you gather, transform, and visualize your data (ref <https://docs.microsoft.com/en-gb/learn/modules/get-data-power-bi/1-overview-power-bi-desktop>)
- Power BI Desktop and the Power BI Service work together. You can create your reports and dashboards in Power BI Desktop, and then publish them to the Power BI Service for others to consume. (ref <https://docs.microsoft.com/en-gb/learn/modules/get-data-power-bi/1-overview-power-bi-desktop>)
- Power BI Desktop = PC application for gathering, transforming, and publishing your data
- Power BI Service = Online SaaS (software as a Service) for business analytics and visualization

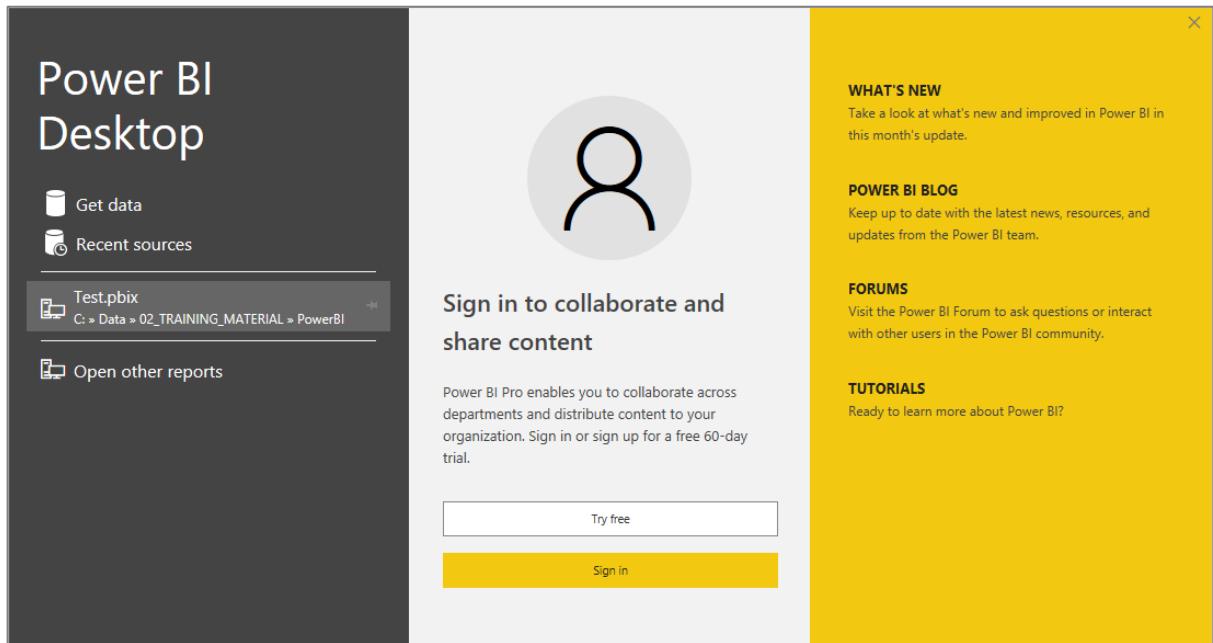


II. GETTING STARTED

1. OPENING THE APPLICATION



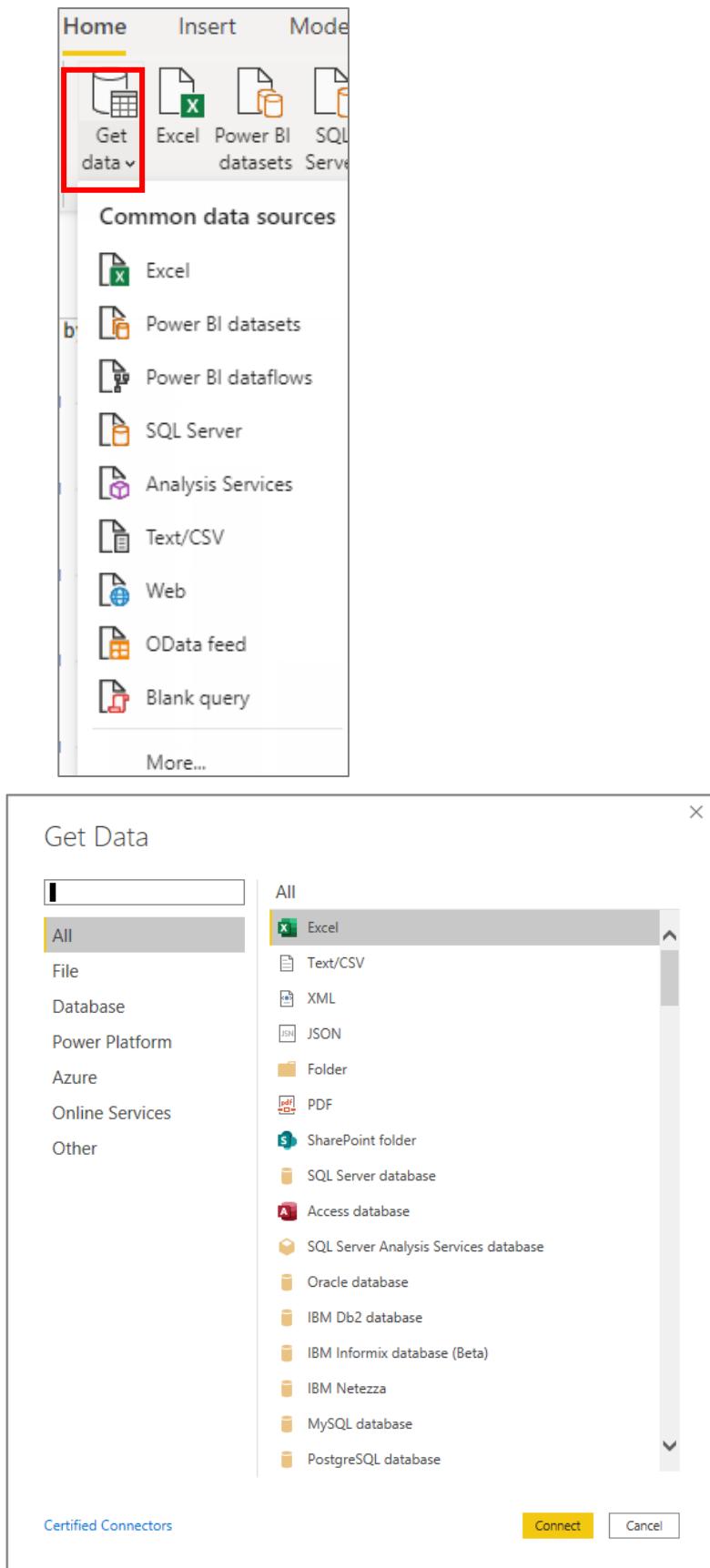
- Click on Power BI icon
- The following window opens:



- Click on **Get data**

Note:

If you are already in Power BI, click on the **Home** tab and then on **Get Data** button

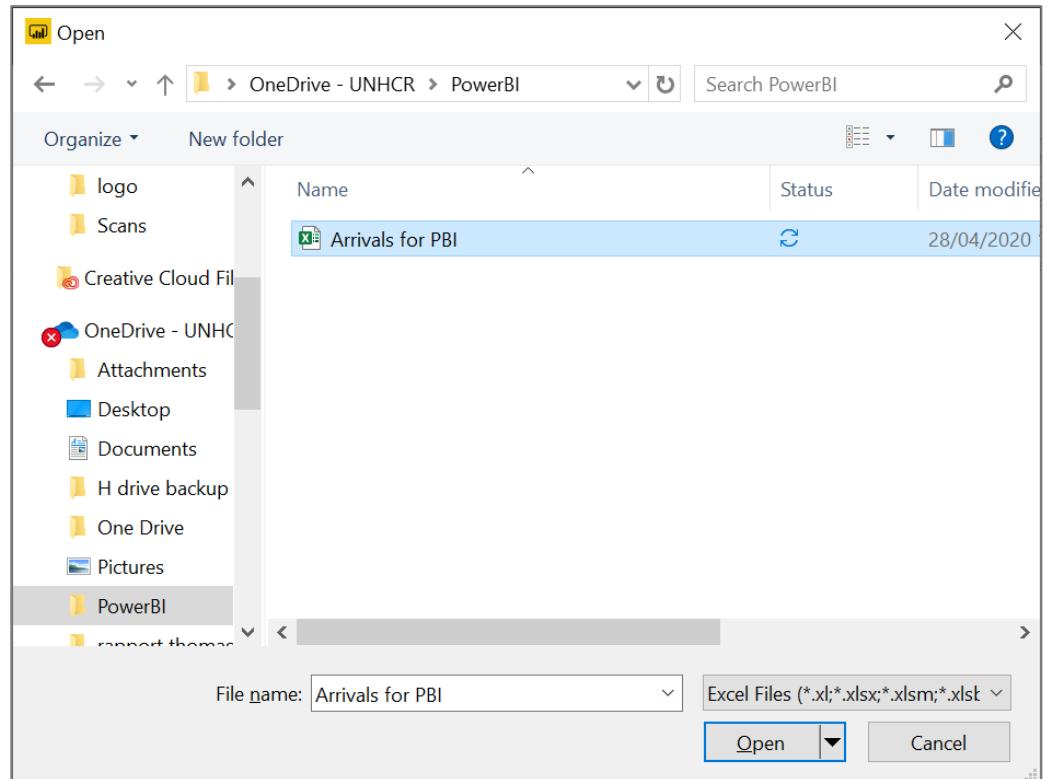


- Click on Excel or any other database you might be using
- Click on **Connect**

Note:

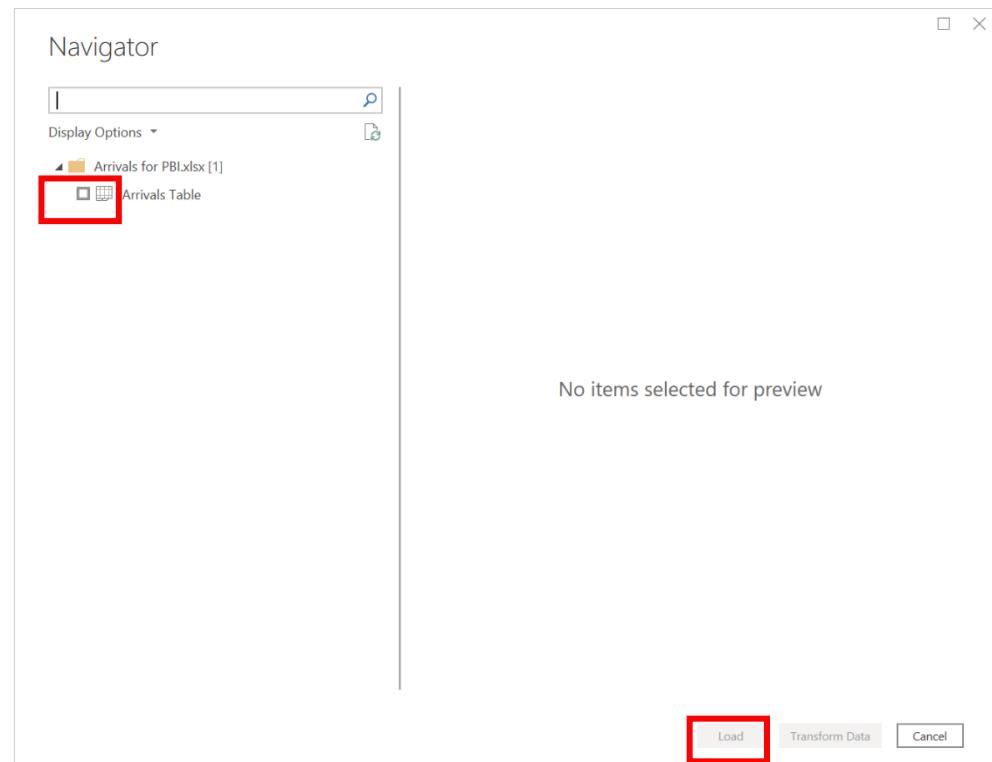
You can connect to many types of data sources, such as: Excel worksheets, local databases (Access for example)

When you connect to an Excel workbook make sure it is formatted as a table.

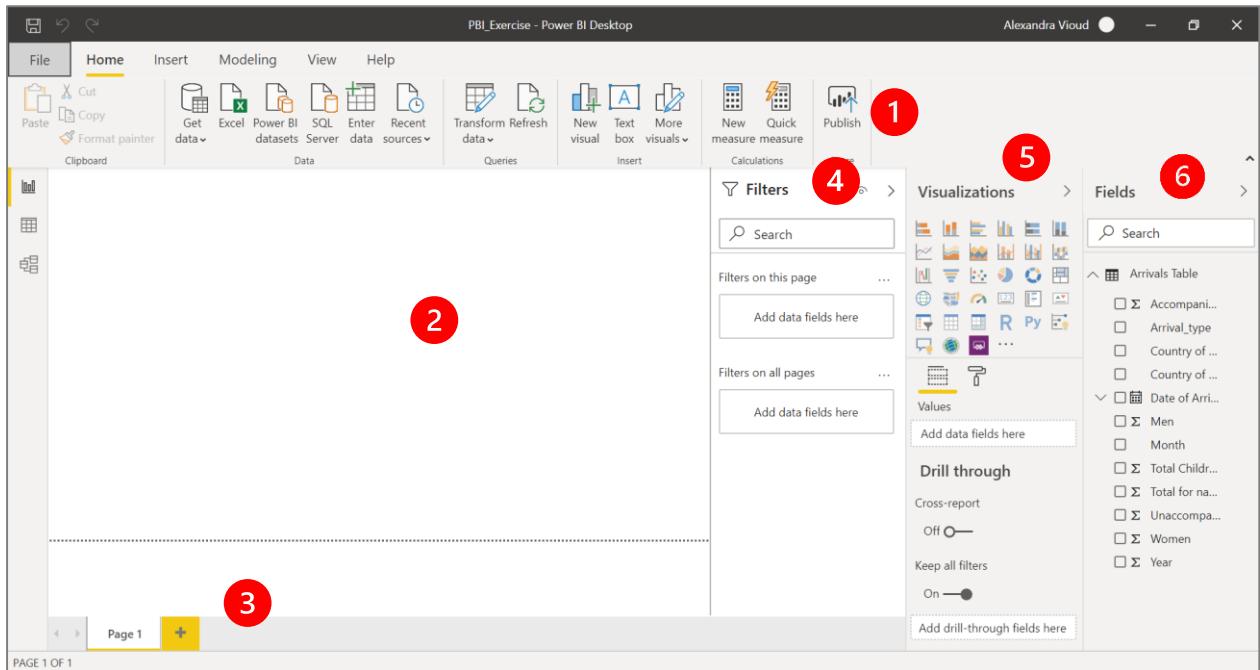


Select **Arrival for PBI** Excel file and click on Open

- Select **Arrivals Table** workbook and click on Load



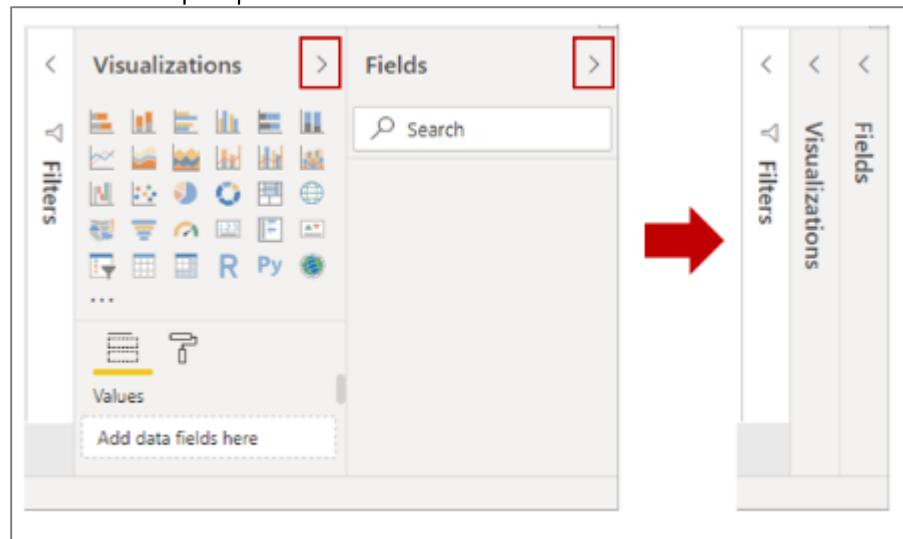
2. WINDOW DESCRIPTION



1. **Ribbon** - displays common tasks that are associated with reports and visualizations.
2. **Report view, or canvas** - where visualizations are created and arranged. You can switch between Report, Data, and Model views by selecting the icons in the left column.
3. **Pages tab** - located along the bottom of the page, this area is where you would select or add a report page.
4. **Filters pane** - where you can apply filters (Basic and Advanced filters) on the selected visual, on the selected page or on the entire document (all pages).
5. **Visualizations pane** - where you can change visualizations, customize colors or axes, apply filters, drag fields, and more.
6. **Fields pane** – displays the column headings of the Excel file. They can be dragged onto the Report view or dragged to the Filters area of the Visualizations pane.

Tip

You can collapse panes



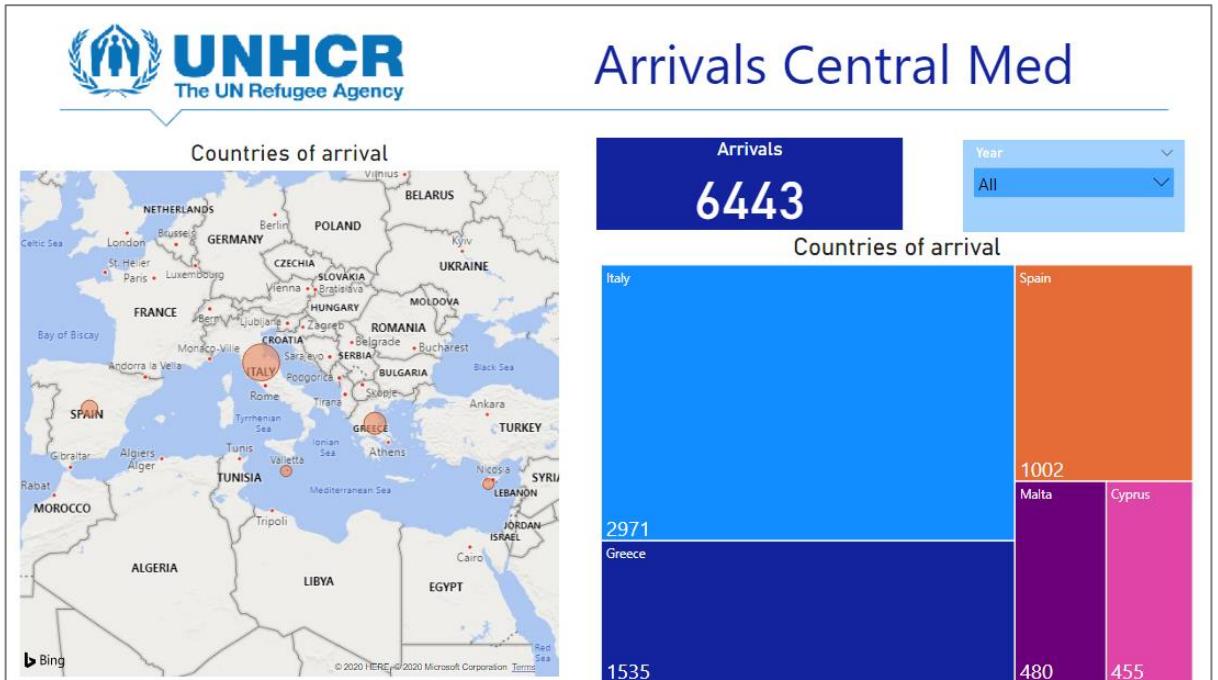
III. CREATE VISUALS

1. EXERCICE 1 - COUNTRY OF ARRIVAL AND TOTAL FOR NATIONALITY BY COUNTRY OF ARRIVAL AND BY YEAR

Excel list

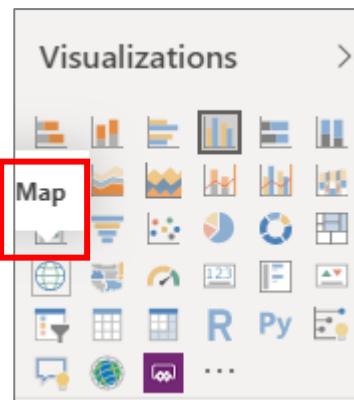
	A	B	C	D	E	F	G	H	I	J	K	L
1	Country of arrival	Year	Month	Date of Arrival	Country of origin	Arrival_type	Men	Women	Accompanied Children	Unaccompanied & Separated Children (UASC)	Total for nationality	Total Children
2	Cyprus	2018	Mar	14/03/2018	Syrian Arab Republic	Sea	78	3	2	0	83	2
3	Cyprus	2018	Apr	13/04/2018	Syrian Arab Republic	Sea	122	89	36	23	270	59
4	Cyprus	2018	May	15/05/2018	Somalia	Sea	5	11	2	4	22	6
5	Cyprus	2018	Jul	14/07/2018	Syrian Arab Republic	Sea	53	1	7	61	7	
6	Greece	2018	Apr	03/04/2018	Iraq	Sea	135	75	154	0	364	154
7	Greece	2018	May	18/05/2018	Stateless	Sea	12	5	8	0	25	8
8	Greece	2018	May	25/05/2018	Kuwait	Sea	1	1	4	0	6	4
9	Greece	2018	Jun	22/06/2018	Yemen	Sea	5	2	1		8	1
10	Greece	2018	Jun	27/06/2018	Syrian Arab Republic	Sea	149	112	224	0	485	224
11	Greece	2018	Jun	28/06/2018	Lebanon	Sea	0	1	0	0	1	0
12	Greece	2018	Jul	02/07/2018	Libya	Sea	1	0	0	0	1	0
13	Greece	2018	Jul	16/07/2018	Tunisia	Sea	2	0	0	0	2	0
14	Greece	2018	Aug	03/08/2018	Turkey	Sea	10	4	6		20	6
15	Greece	2018	Aug	10/08/2018	Morocco	Sea	11	0	0	0	11	0
16	Greece	2018	Oct	22/10/2018	Rwanda	Sea	1	0	0	0	1	0
17	Greece	2018	Nov	09/11/2018	Somalia	Sea	7	2		0	9	0
18	Greece	2018	Nov	25/11/2018	Nigeria	Sea	4	0	0	0	4	0
19	Greece	2018	Dec	14/12/2018	State of Palestine	Sea	20	9	15	0	44	15
20	Italy	2018	Jan	02/01/2018	Sierra Leone	Sea	24	4	1	21	50	22

Power BI File – Page 1 – Arrivals Central Med



Adding a Map on the report

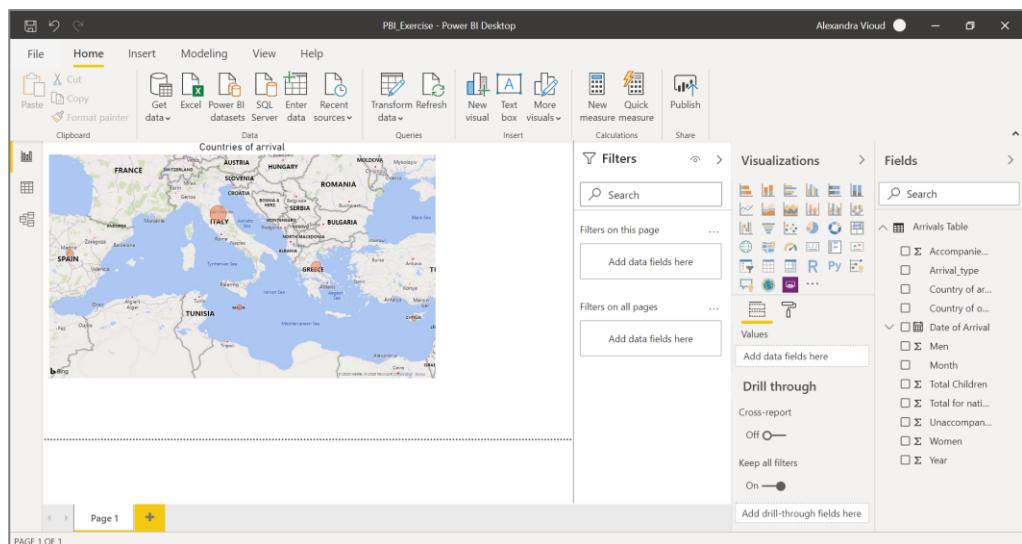
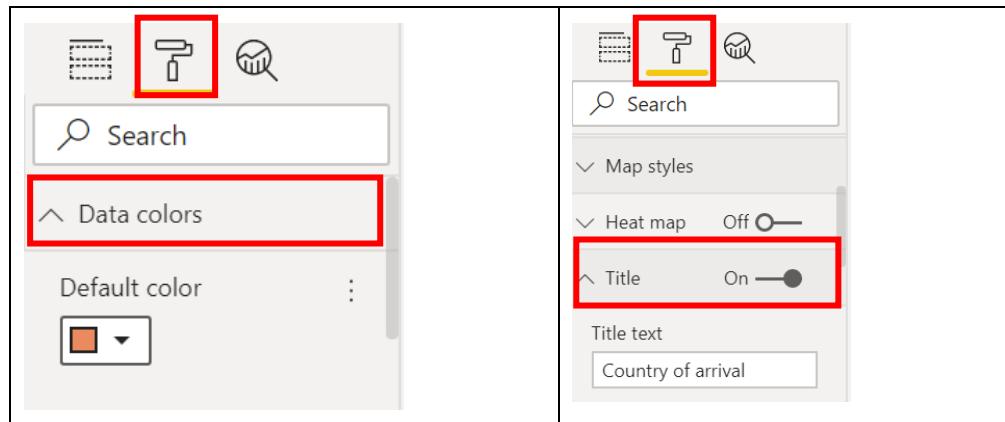
- Click on the visualisations you would like to use, here a Map



- Check the field from the **Fields** list to include in the Report view, here **Country of arrival** and **Total for nationality**

- To modify the title or the Bubble colour of the map, click on the **Format** tool:

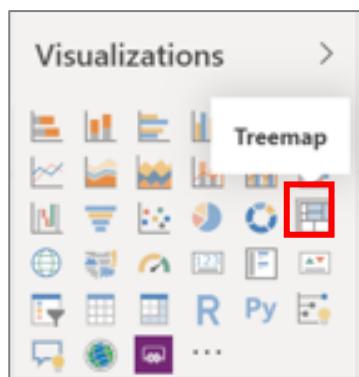
Select Data colors to change the color	Select Title to modify the title
---	---



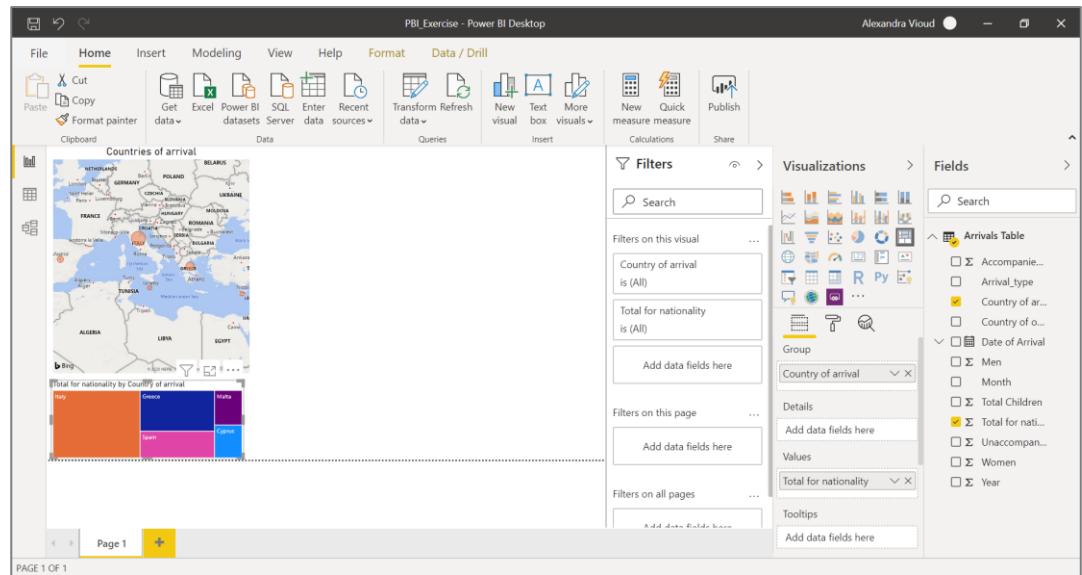
- Move your mouse pointer over any bubble to get all the details

Adding a Treemap on the report

- Make sure you deselect the current visualization on the canvas before selecting a new one
- Click on Treemap

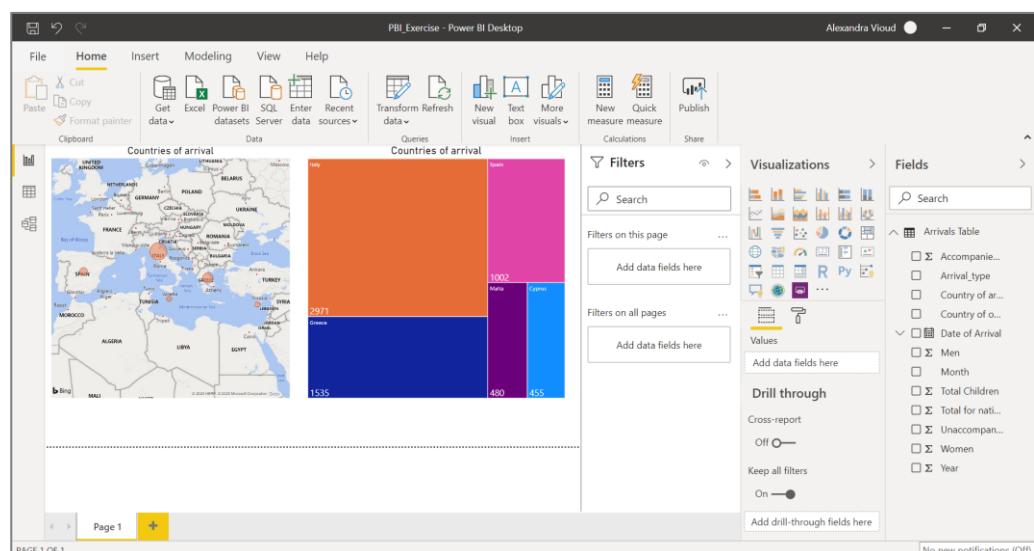


- Check the fields to include, here **Country of arrival** and **Total for nationality**



- You can move the Treemap into the canvas and resize it
- To format the **Treemap** select the **Format** tool:

<p>To add labels, change the size of the labels... click Data labels</p>	<p>To Modify the Title, click title</p>
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Tips

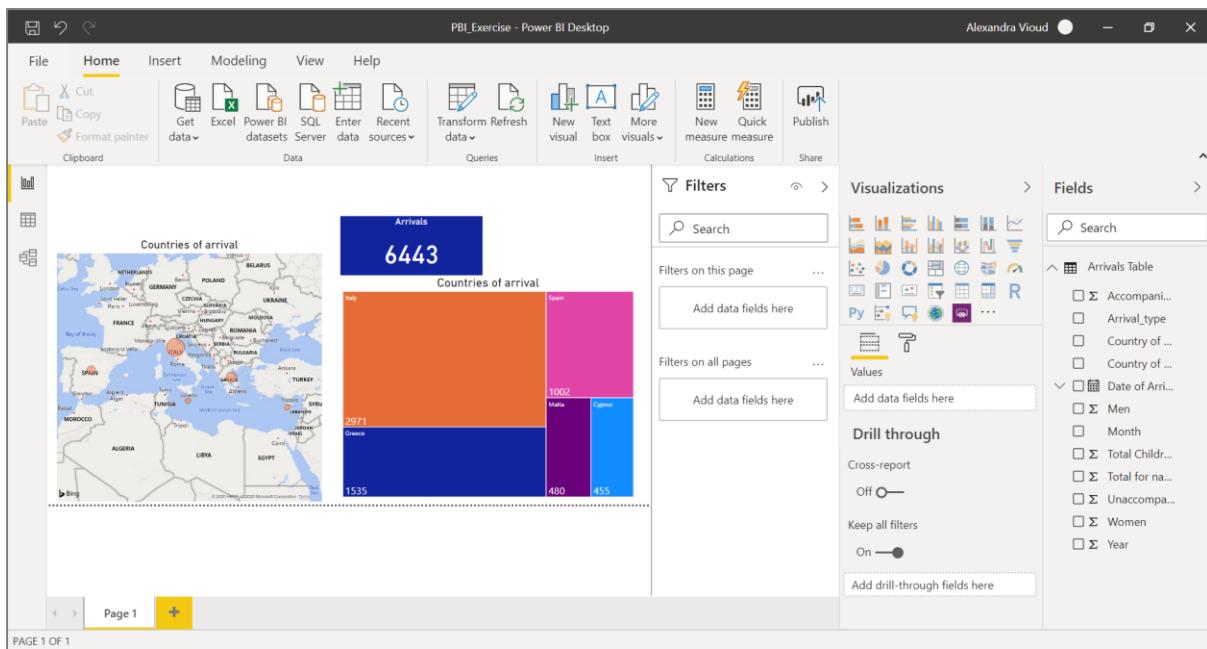
If you select a specific country on your Treemap, the selection will also apply on all the other visuals you have in your page 1 of your report, here the Map. To clear the selection, double click on another country in the same visual, here the Treemap

Adding a card on the report to display the total by nationality

- Deselect the current visualization on the canvas
- Click on **Card** and select the field **Total for nationality**

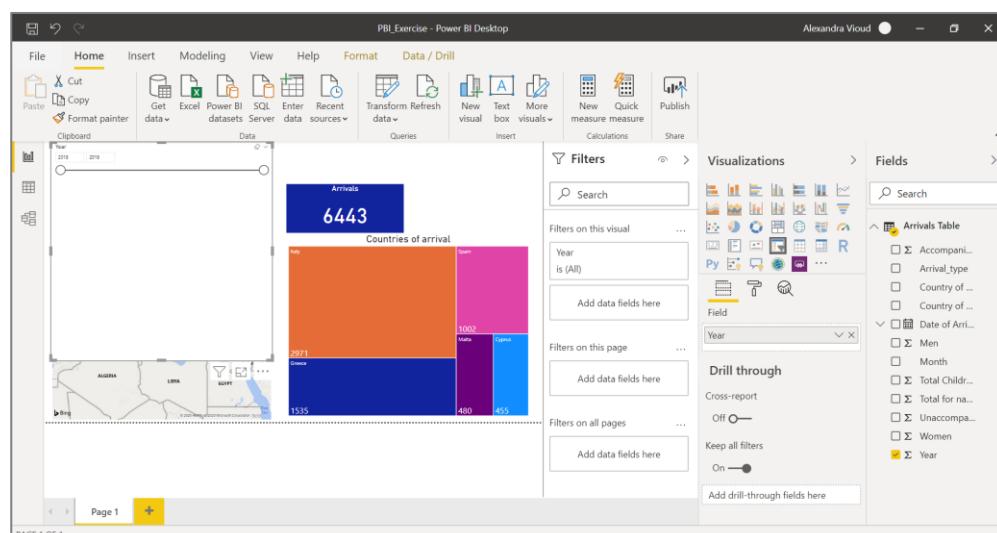
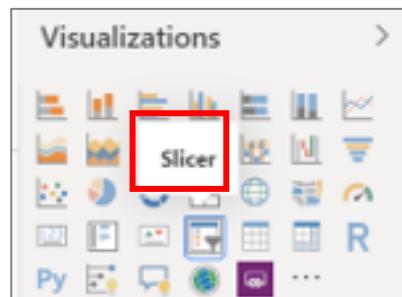
- Position the **Card** in the canvas and format it with the **Format** tool:

To change the color of the Background	To change the color of the Label	To remove the Category label	To activate and add a Title

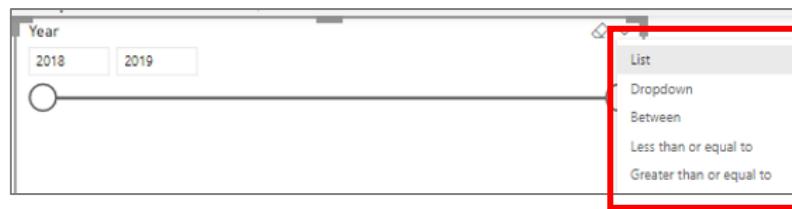


Adding a Slicer to filter by year

- Deselect the current visualization on the canvas
- Click on **Slicer** and select the field **Year**



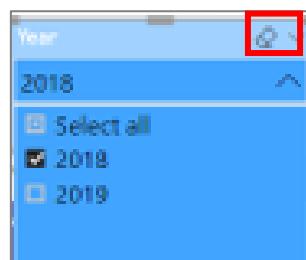
- Position the **Slicer** in the canvas and format the **Slicer**:
 - To select a different type of **Slicer** click on the drop-down arrow in the right corner of the slicer



- If you select **List** or **Dropdown** format (as shown below) go to the selection controls and activate Show “Select all” option in the **Format** tool:

To change the color of the Background	To change the color of the Item	The title of the field displays in the Slicer header. You can deactivate it and replace it by a Title (go to title)

- To clear a selection, click on the eraser in the right corner



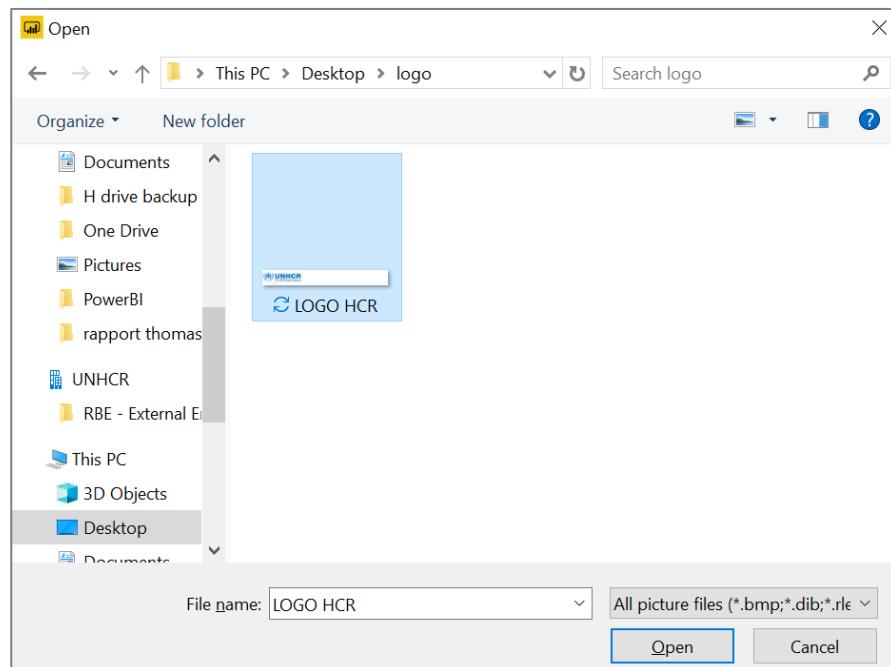
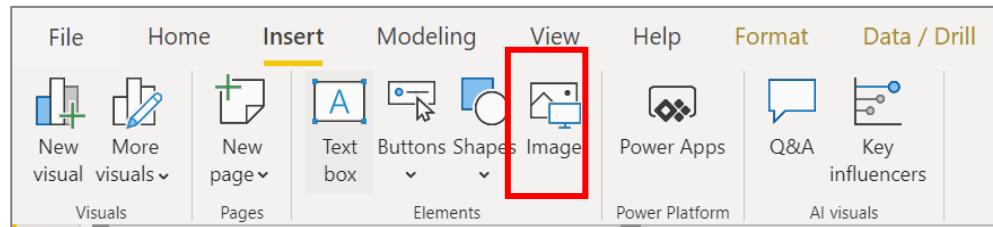
Inserting a title to the report

- Click on the **Text Box** button and type your Text

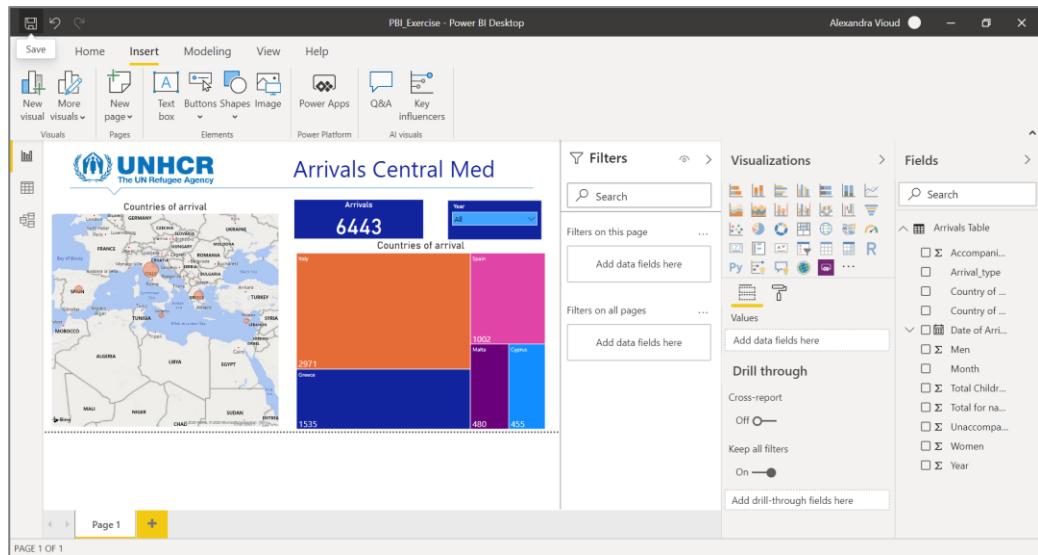


Inserting a picture to the report

- Click on **Insert** tab and on the **Image** button



- Select picture, LOGO HCR above
- Click on **Open**



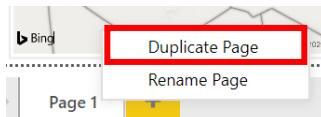
2. EXERCISE 2 - COUNTRY OF ORIGIN AND TOTAL FOR NATIONALITY BY COUNTRY OF ARRIVAL AND BY YEAR

- Create a new page in your report
- Click on the + sign

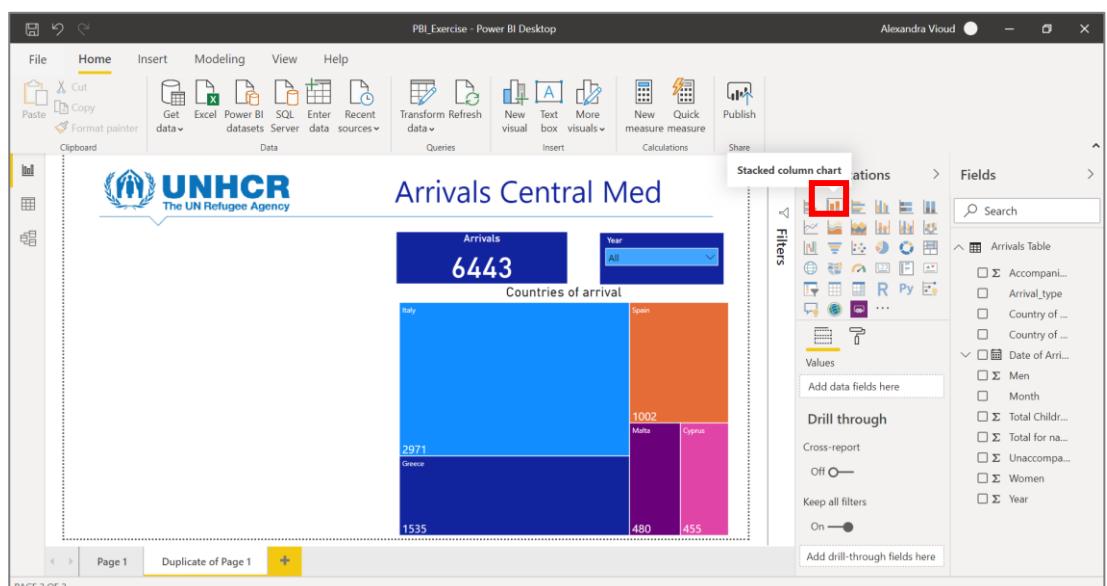
Tips

You can also duplicate page 1 (to keep the format you are interested in)

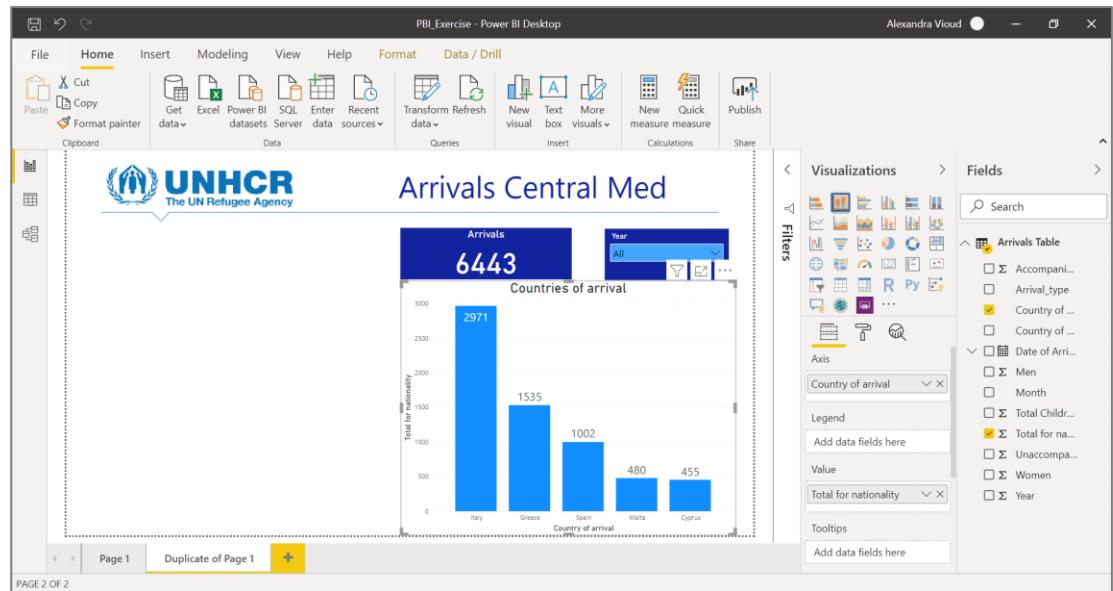
- In the example below we will duplicate page 1
- Right click page 1 and select **Duplicate Page**



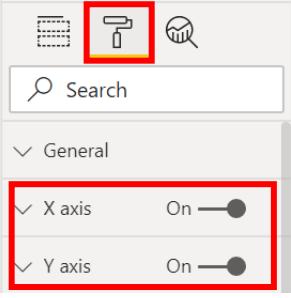
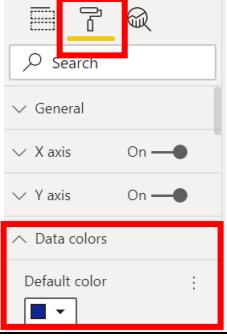
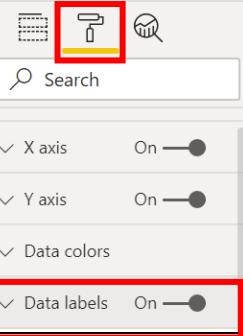
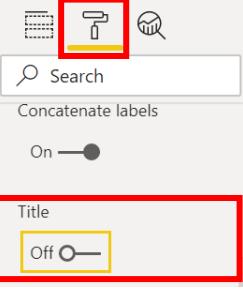
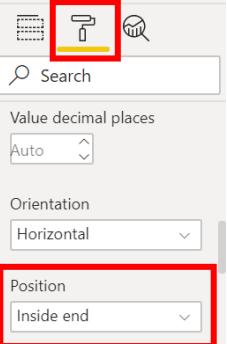
- Remove the visualizations you are not interested in and change the visualization type by another one

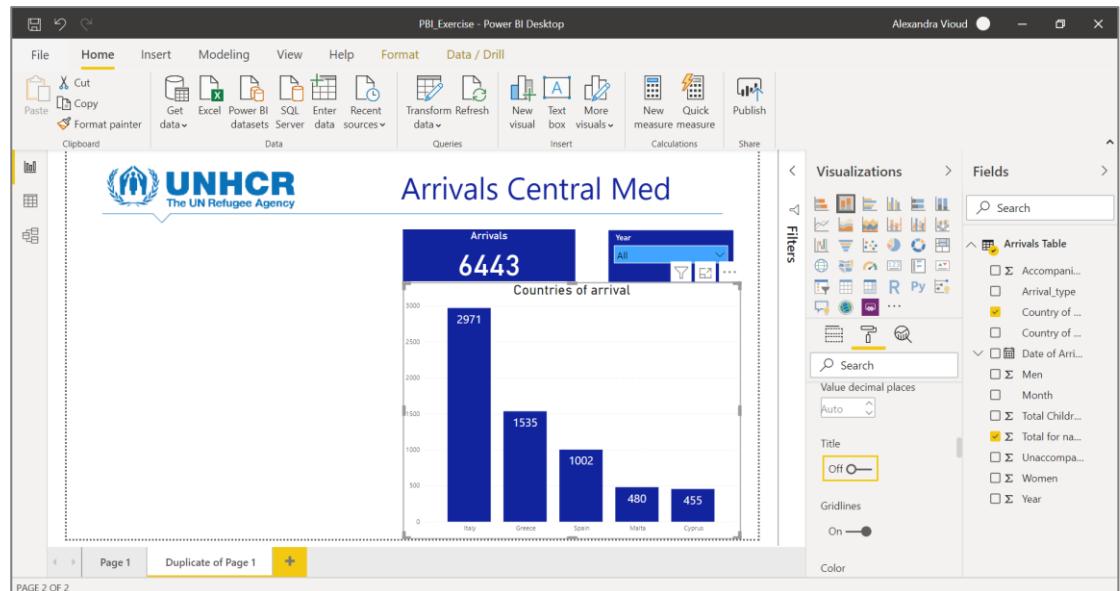


- Select the visualization you want to change and click on the new visualization, here we will select **Stacked column chart**
- The fields previously selected remain the same



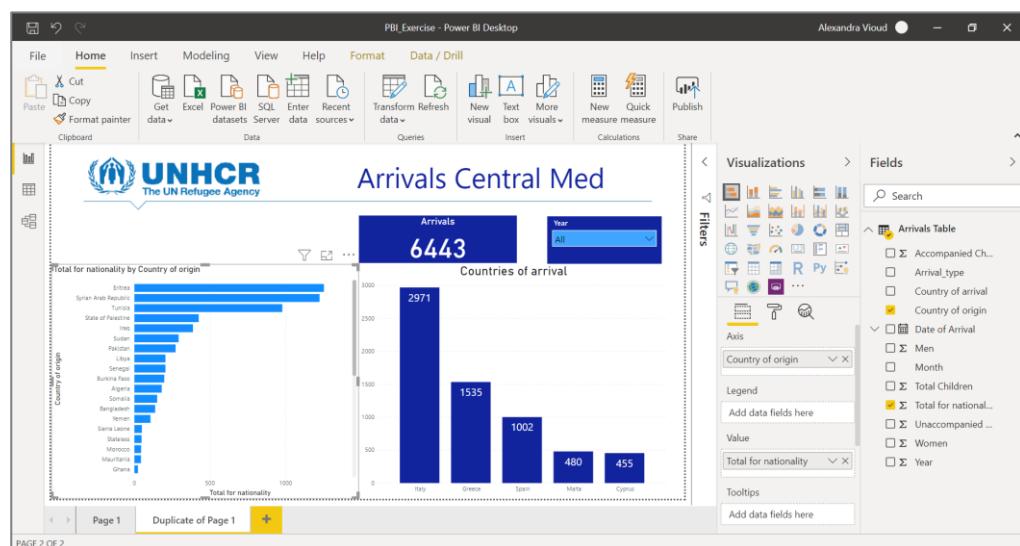
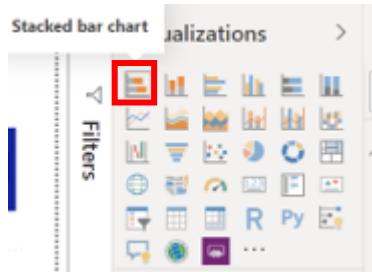
- Format the Stacked column chart with the **Format** tool:

To modify X axis Or Y axis	To change the color of the labels click on Data colors	To modify the content of the label click on Data labels
		
To remove the Axis title, go to Title		To change the position of the value of the label, go to Position
		



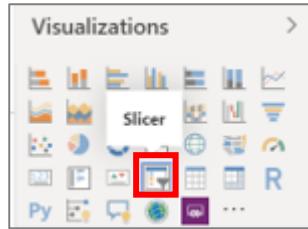
Adding a Stacked bar chart on the report to display the total of arrivals by Countries of Origin

- Deselect the current visualization on the canvas by clicking on the empty space
- Click on **Stacked bar chart** and select the fields **Country of Origin** and **Total** for nationality

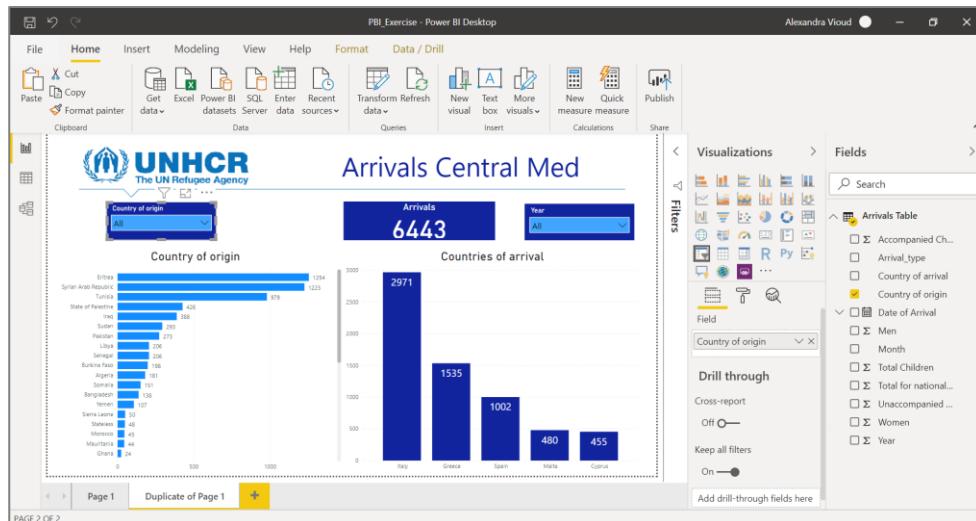
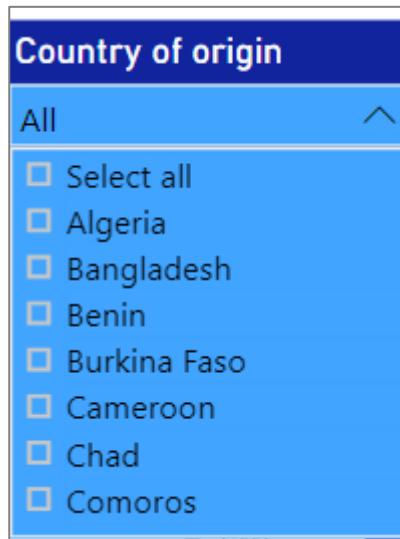


- Format the **Stacked bar chart** with the **Format** tool, the same way than the Stacked column chart

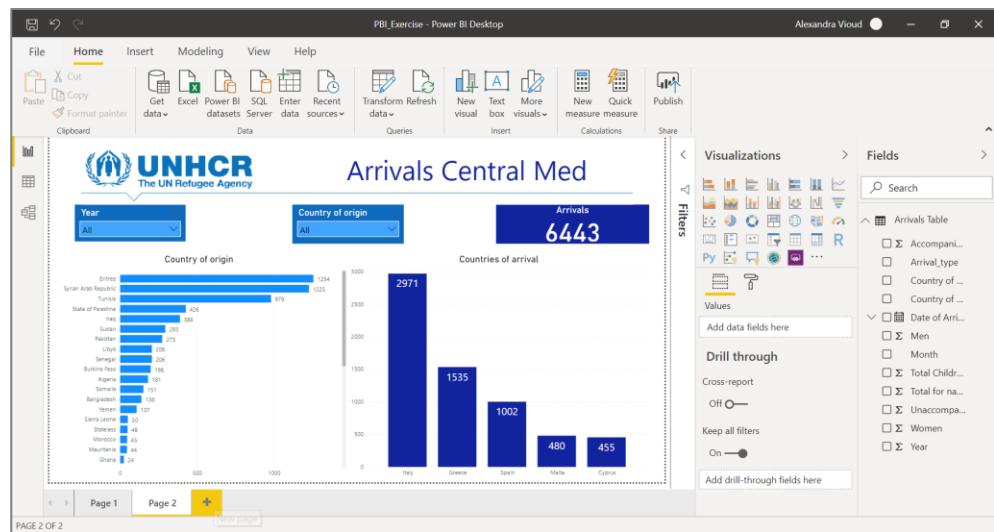
Adding a Slicer to filter by Country of Origin



- Deselect the current visualization on the canvas
- Click on **Slicer** and select the field **Country of Origin**
- Or copy and paste the existing slicer for year and change the field from **Year** to **Country of origin**



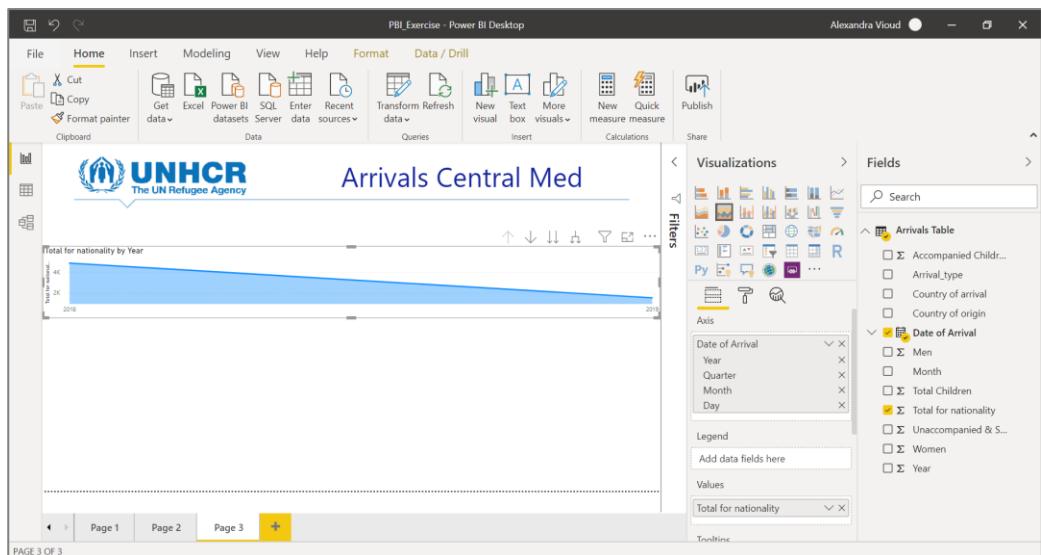
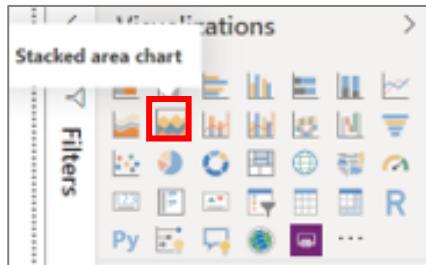
- Reorganise, rename your page and create page 3



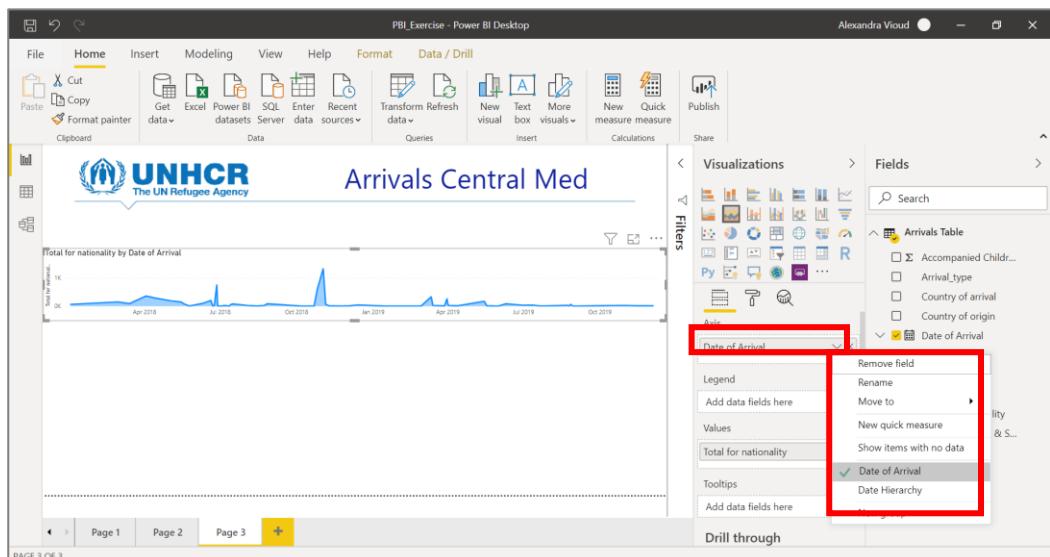
3. EXERCICE 3 - TRENDS OF ARRIVALS OVER 2 YEARS, TYPE OF ARRIVAL (BY LAND OR BY SEA) AND THE DEMOGRAPHICS

Adding a Stacked area chart on the report to display the trend of arrivals over 2018-2019

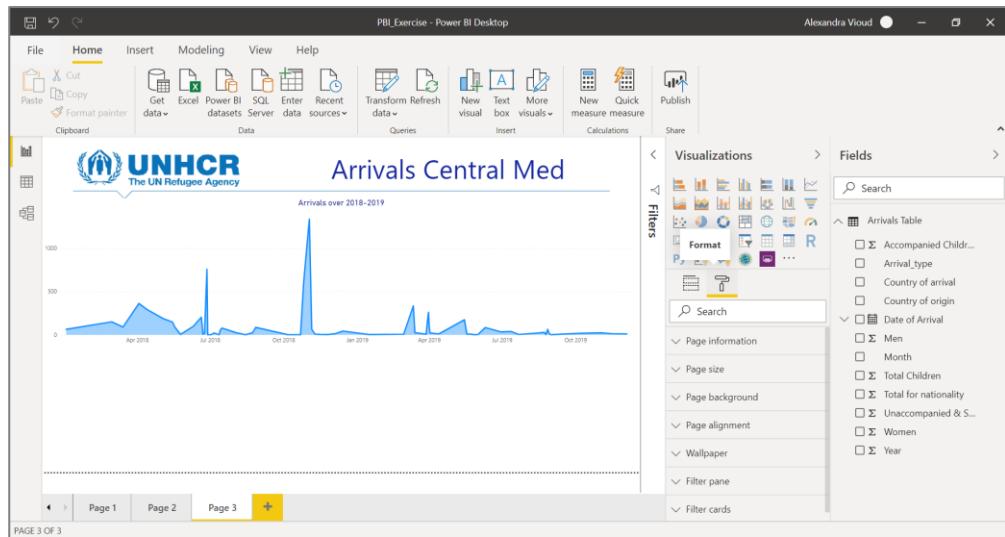
- Click on **Stacked area chart** and select the fields Date of arrival and Total for nationality



- To see the trend per month, click on **Date of Arrival** and select **Date of Arrival**

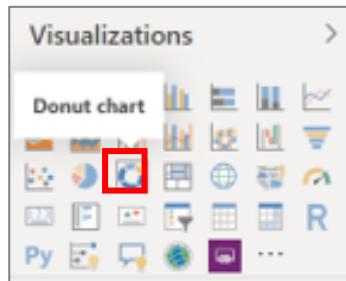


- Click on the **Format** tool to format your chart

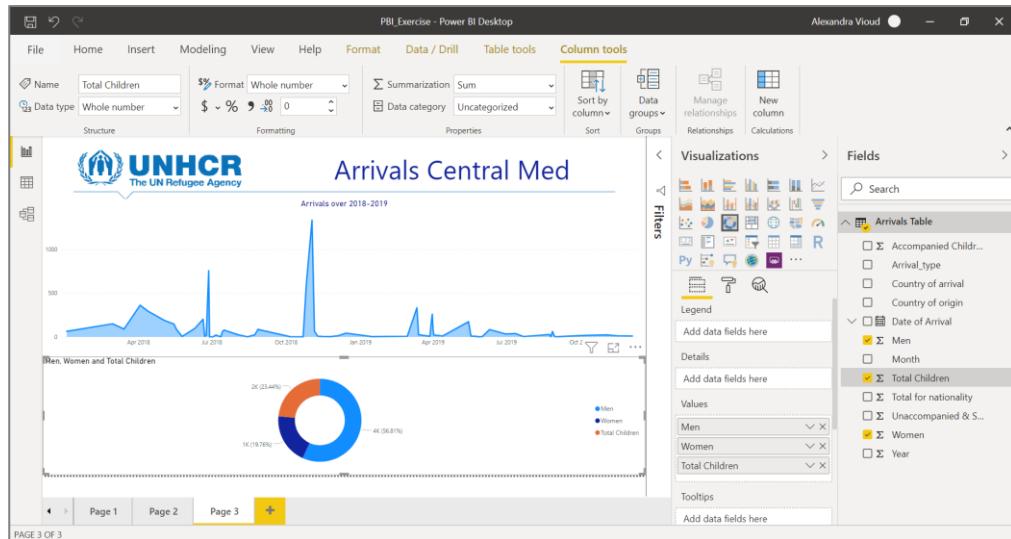


Adding a Donut chart to show Demographics

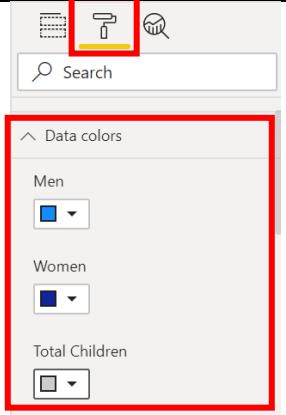
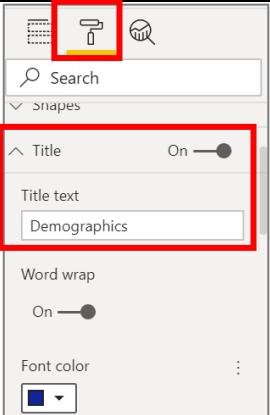
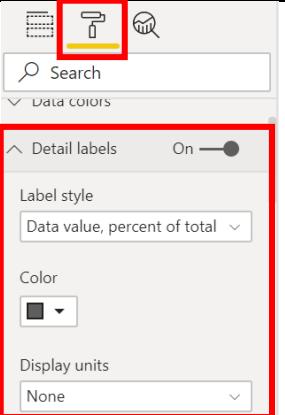
- Deselect the current visualization on the canvas by clicking on the empty space
- Click on **Donut chart**

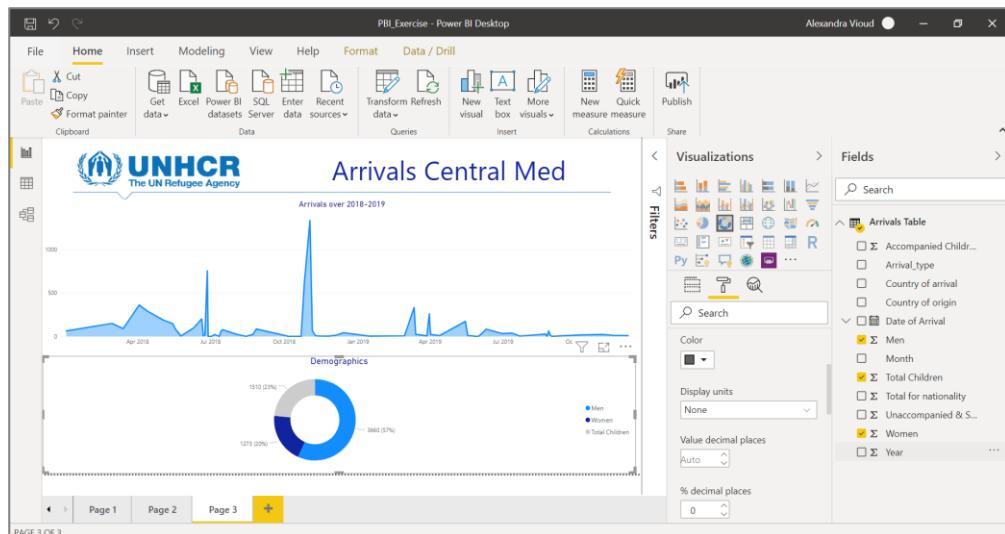


- Select the **Men**, **Women** and **Total Children** fields



- Format the **Donut chart** with the **Format** tool:

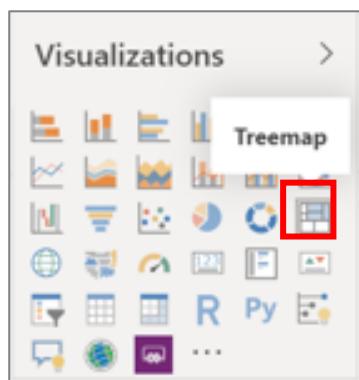
To change the color for Total children, click on the orange slice (see Donut above)	To change the Title, click on Title	To change the unit of the labels, click on Detail labels
		

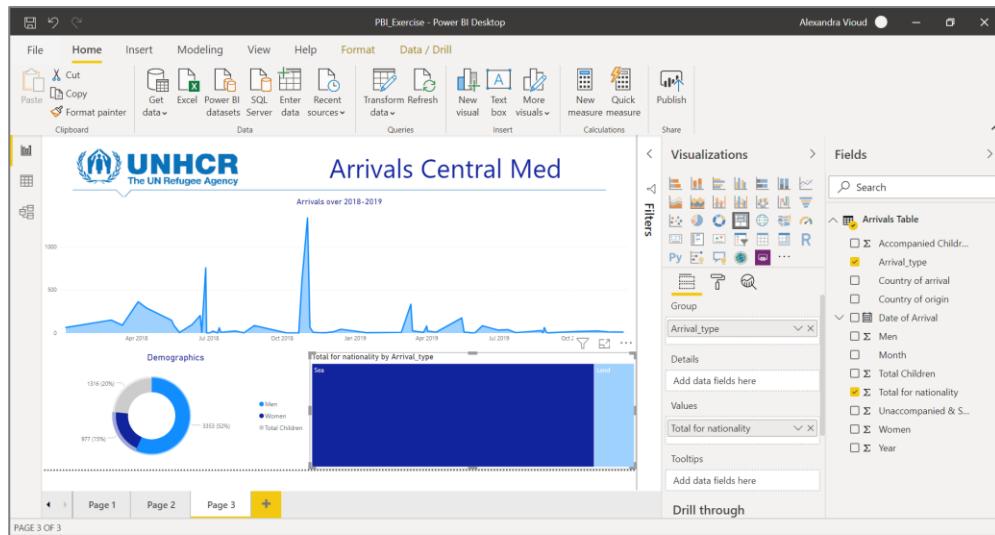


- Resize the Donuts, deselect the current visualization on the canvas by clicking on the empty space

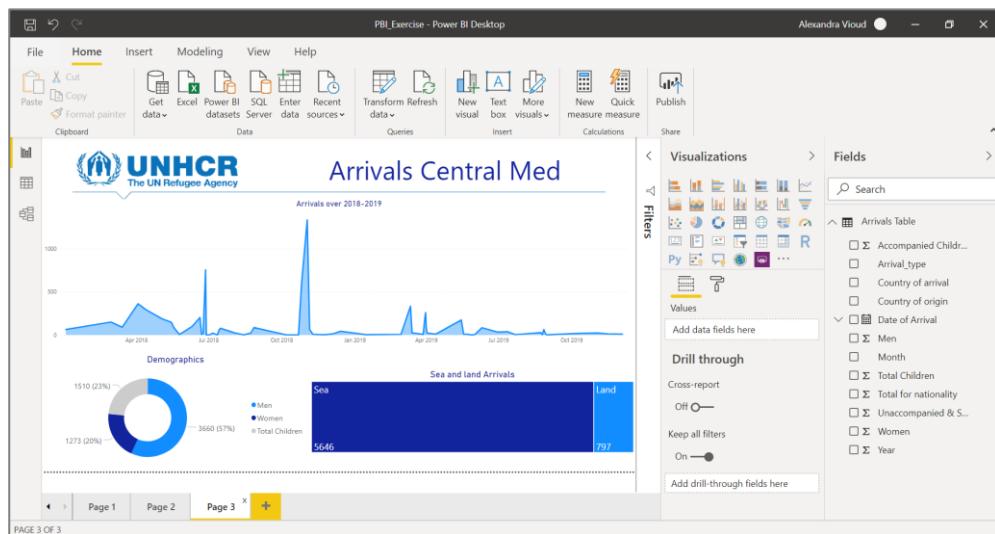
Adding a Treemap chart to show the types of arrivals (Sea or Land)

- Click on **Treemap chart** and select the fields Arrival Type and Total for nationality



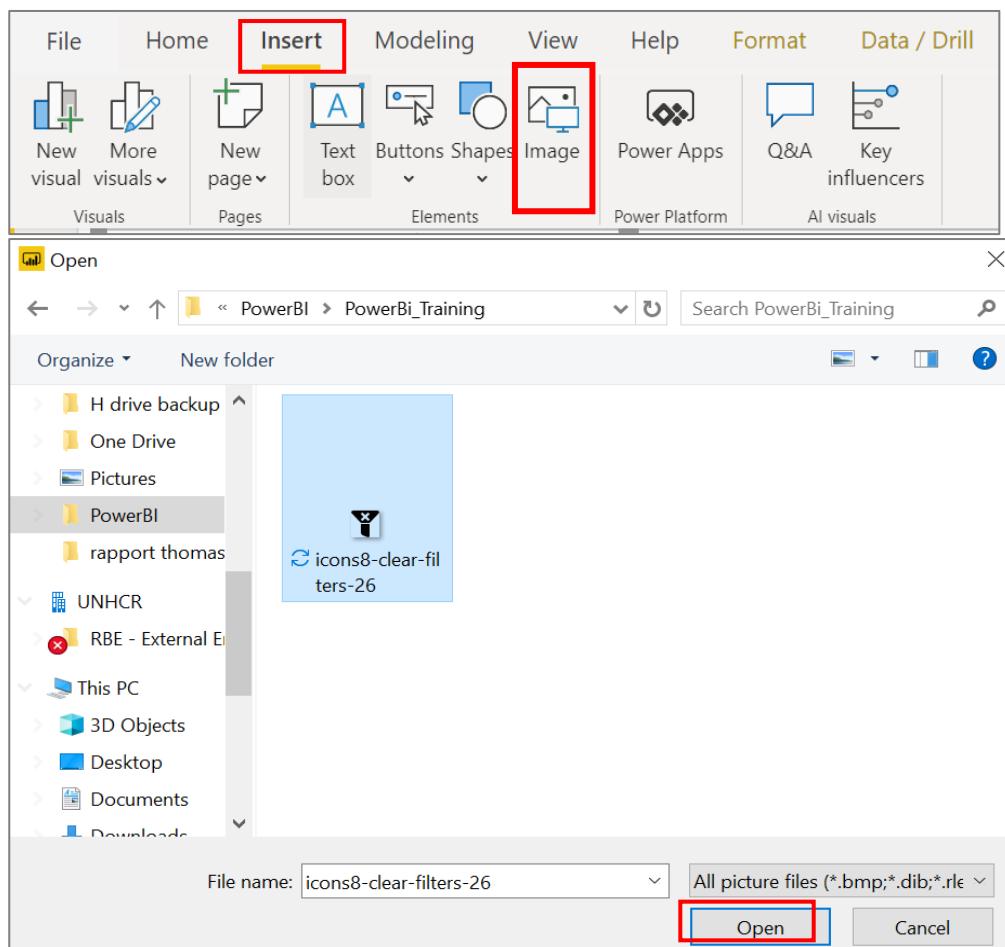


- Format the Treemap chart with the Format tool:

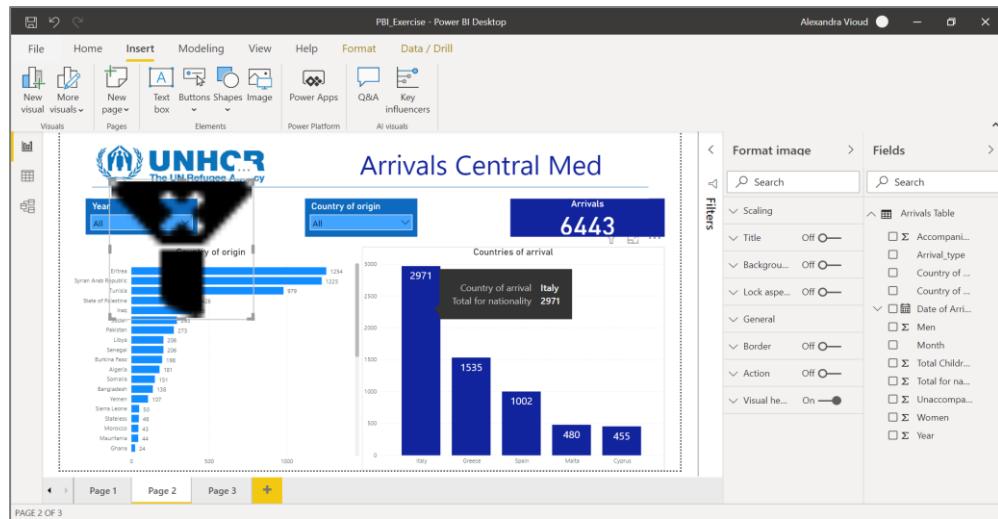


IV. CREATE A CLEAR FILTERS BUTTON:

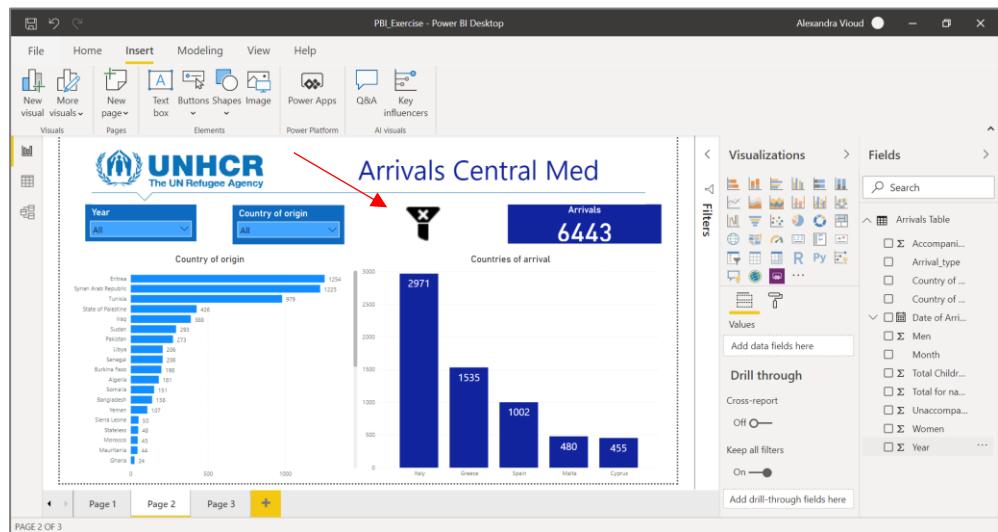
- Go to page 2 of your dashboard
- Get an image of the “Clear Filters Button” 
You can download it on: <https://icons8.com/icon/5310/clear-filters>
- Click on **Insert** tab and on the **Image** button



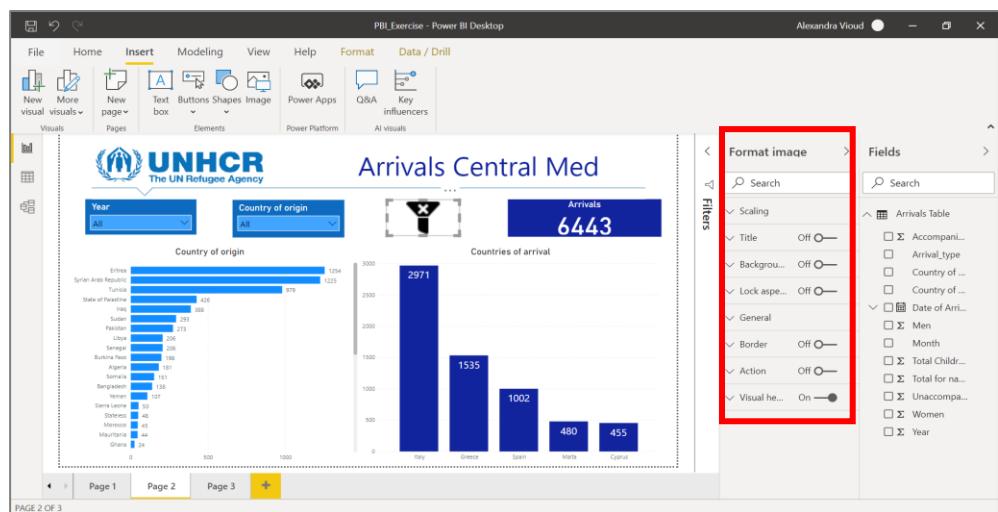
- Select picture, icons-8-clear-filters-26
- Click on **Open**



- Resize the icon and reorganise your page

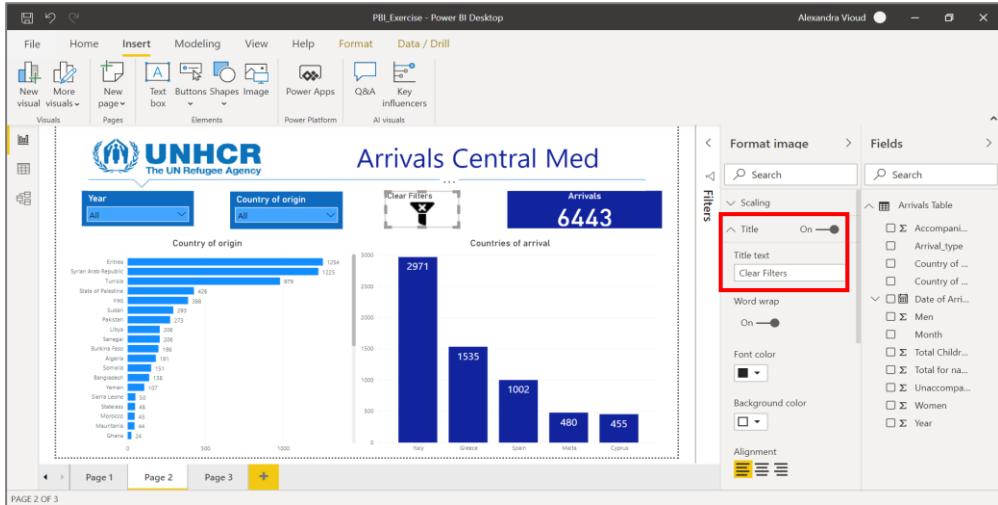


- Select the icon



- A new pane “Format Image” appears on the left, to format the icon

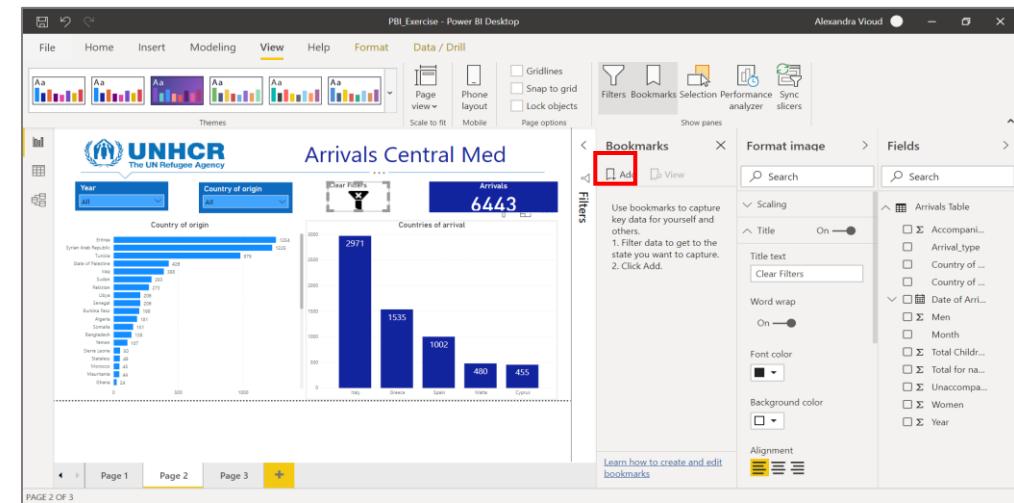
- Click on Tile and give a title to the icon: Clear filters



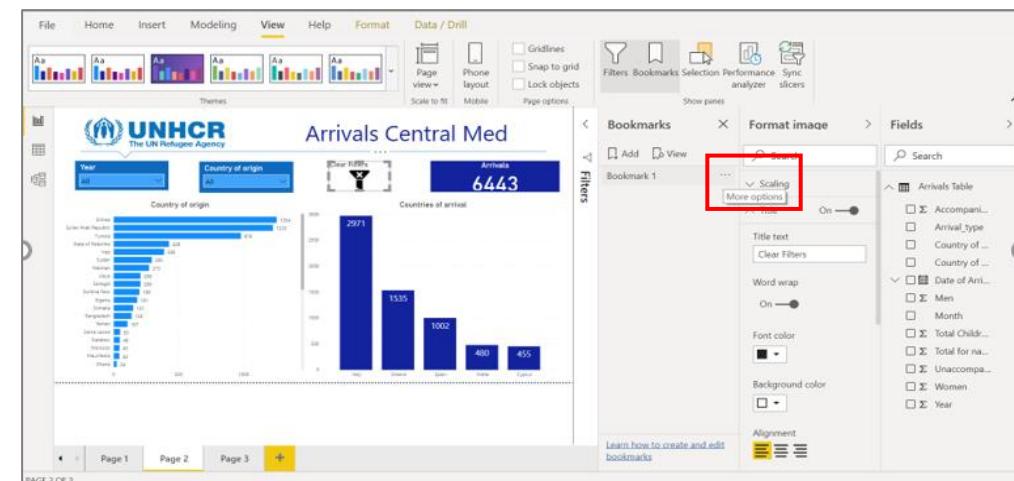
- Click on view and select Bookmarks



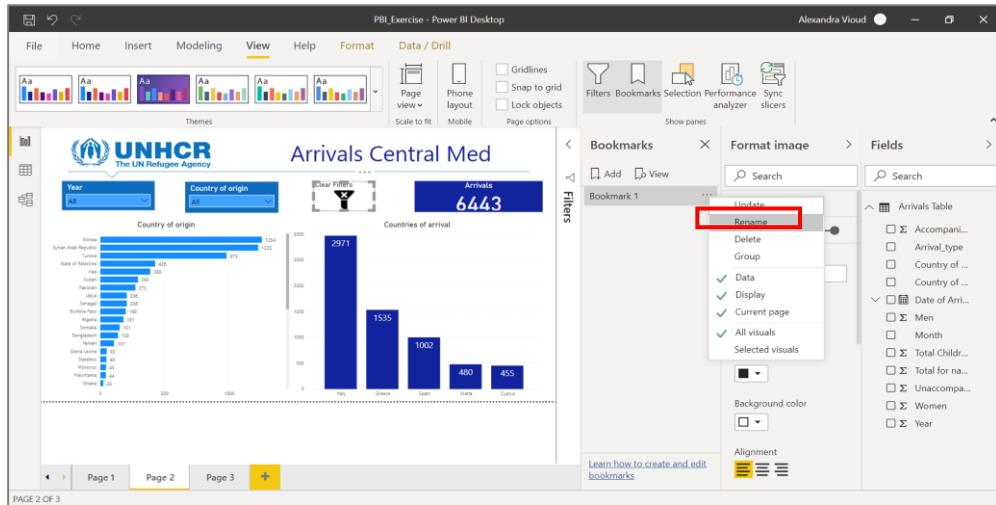
- A bookmarks pane is open, click on Add



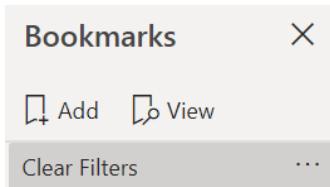
- Click on the 3 dots, More options



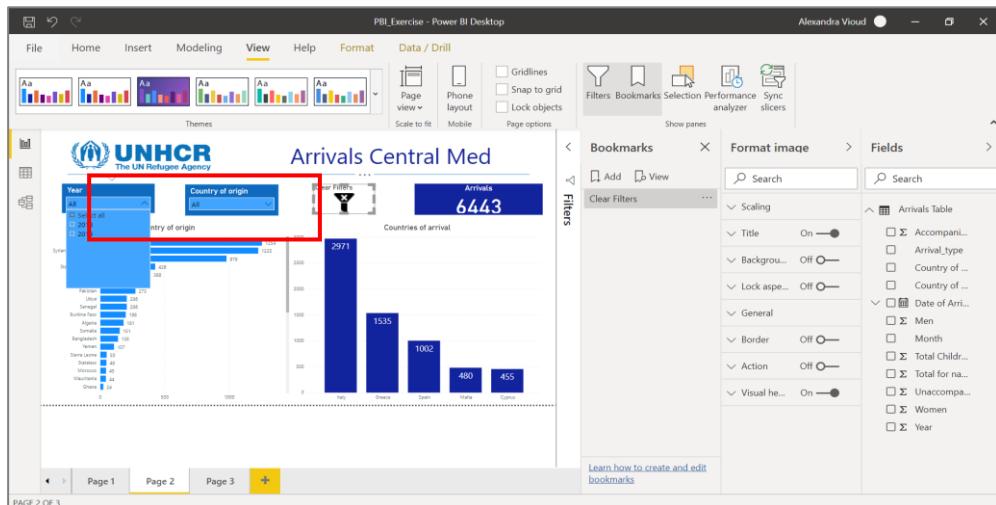
- Click on Rename



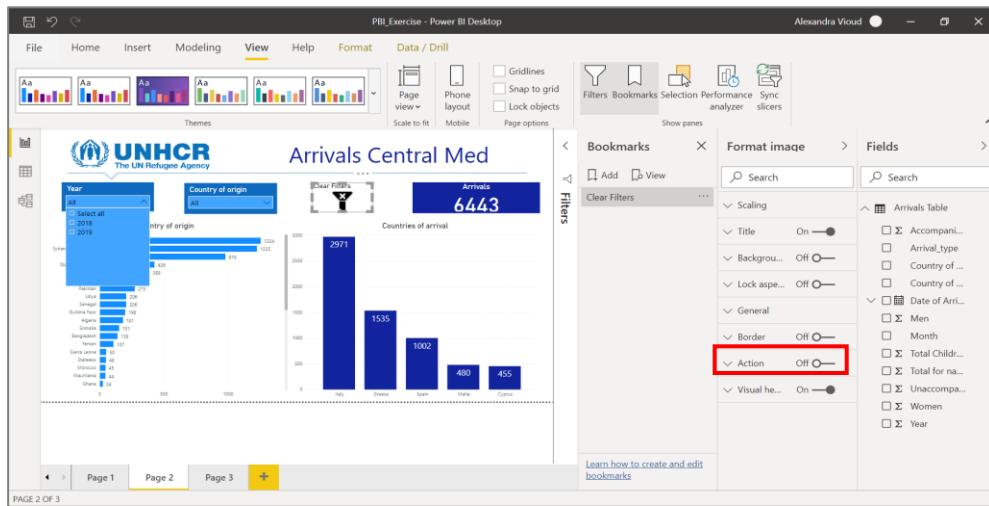
- Type Clear Filters:



- Click on the Canvas and make sure that there is no active filter



- To link the Bookmark to the icon, Active the Action button in the Format Image pane, by switching from Off to On



Under Type, select Bookmark	Under Bookmark, select Clear Filters
<p>Action <input checked="" type="checkbox"/></p> <p>Type</p> <p>Bookmark</p> <p>Back</p> <p>Bookmark</p> <p>Q&A</p> <p>Web URL</p>	<p>Action <input checked="" type="checkbox"/></p> <p>Type</p> <p>Bookmark</p> <p>None</p> <p>None</p> <p>Clear Filters</p>

- The Clear Filter Button is now active.