

Power BI



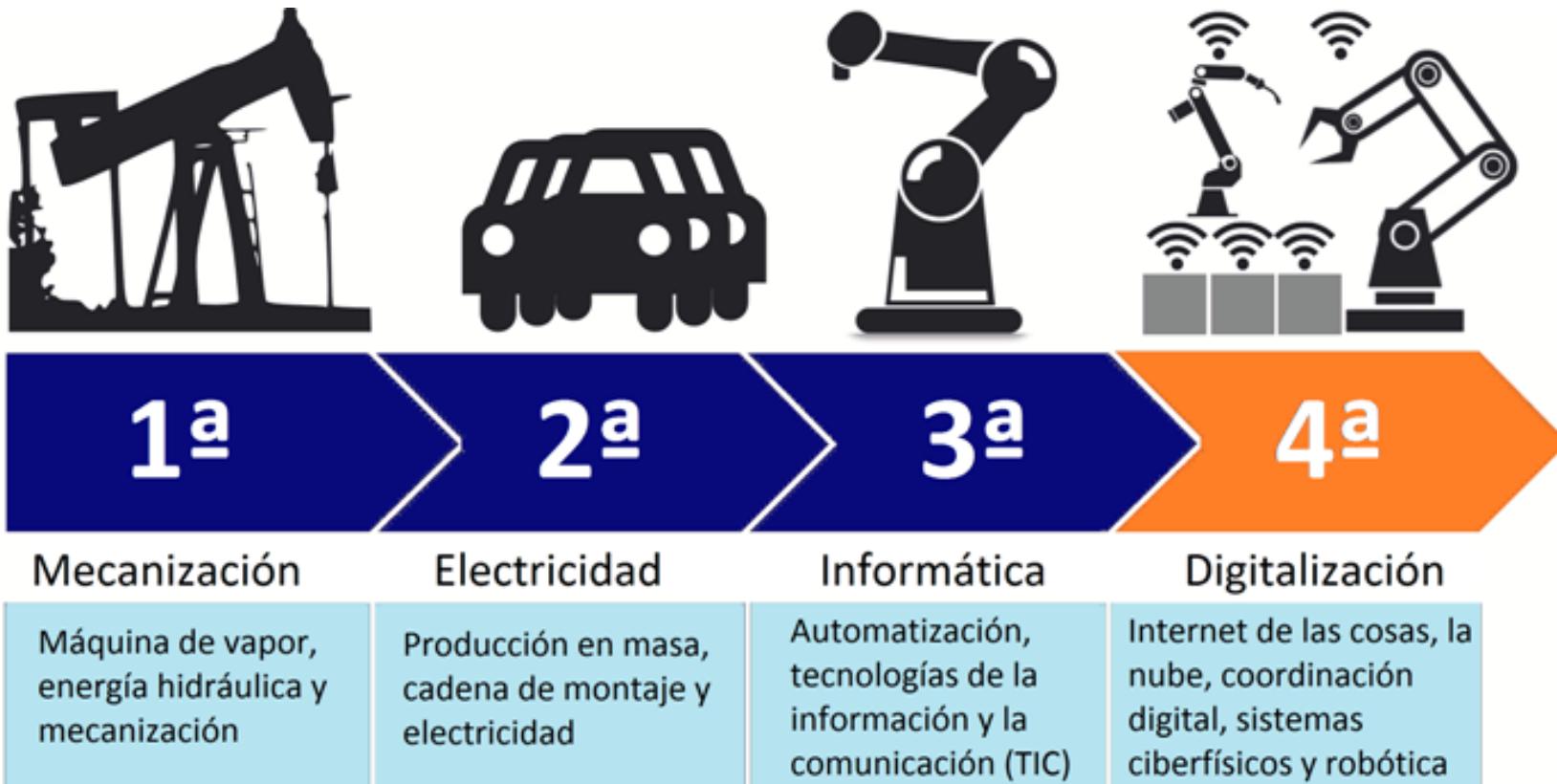
PRESENTACIONES



¿QUÉ ES BI?



REVOLUCIÓN INDUSTRIAL



¿QUÉ ES POWER BI?



Power BI Desktop

COMPETIDORES





Power BI

vs



Tableau

vs



Qlik

POWER PLATFORM



Microsoft Power Platform

The low code platform that spans Microsoft 365, Azure, Dynamics 365, and standalone apps.



Power BI
Business analytics



Power Apps
App development



Power Automate
Process automation



Power Virtual Agents
Intelligent virtual agents



Power Pages
External-facing websites



**Data
connectors**

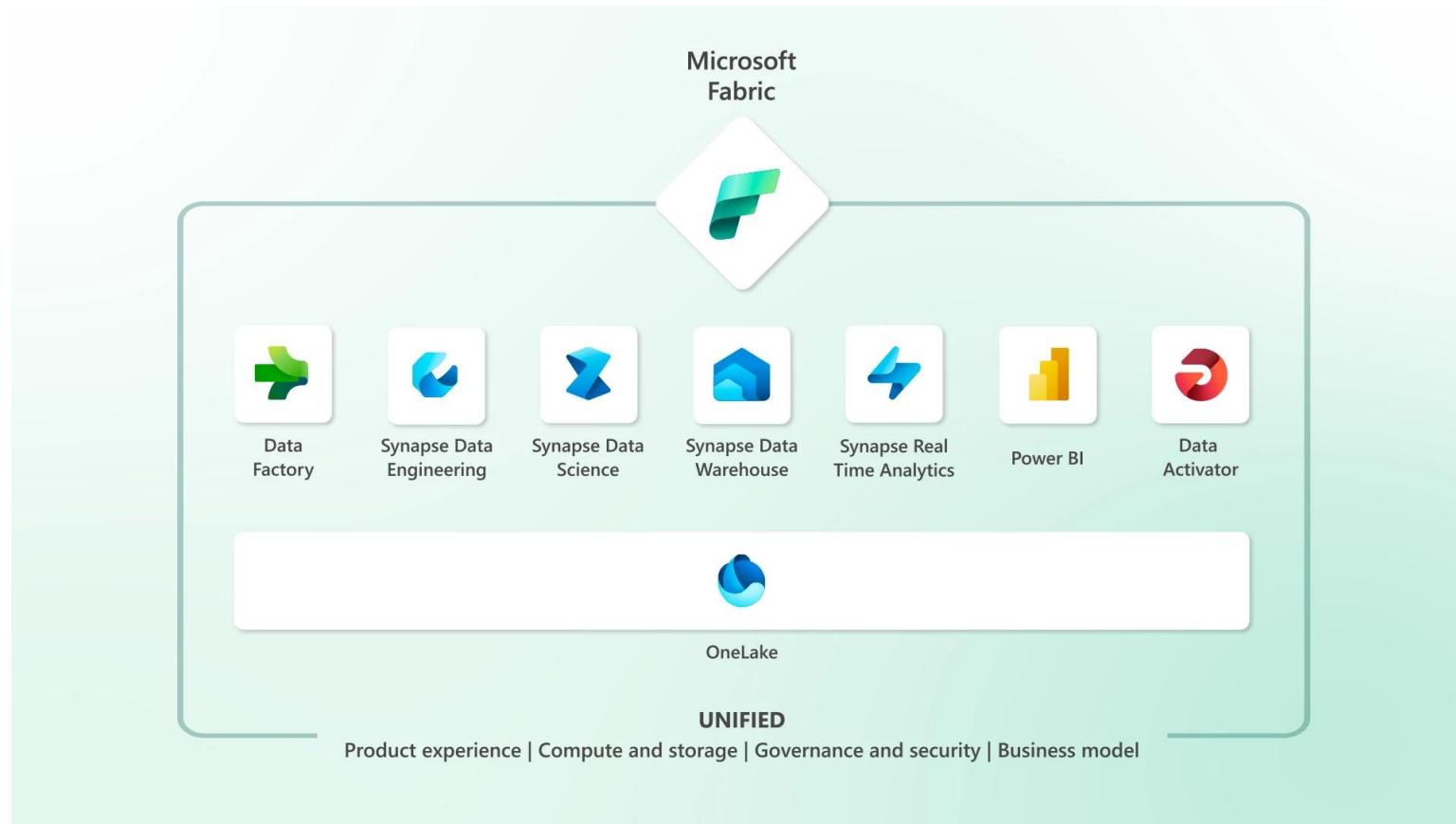


AI Builder



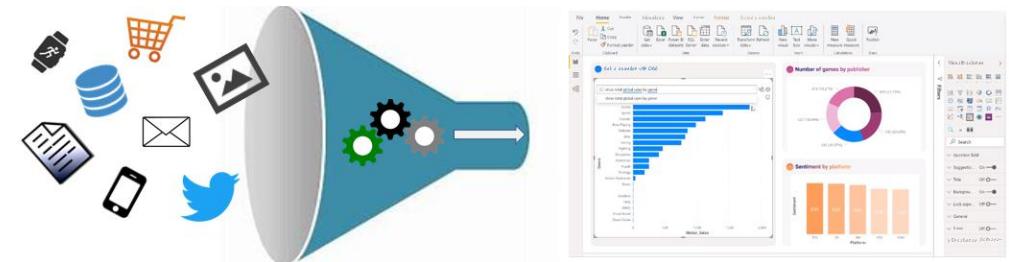
Dataverse

MICROSOFT FABRIC



CASOS DE USO

- Seguimiento del inventario
- Identificación de hábitos de compra
- Detección de tendencias y patrones de usuarios
- Recomendación de compras
- Definición de optimizaciones de precios
- Identificación y detención del fraude



TIPOS DE ANÁLISIS

- Descriptivo
- Diagnóstico
- Predictivo
- Prescriptivo
- Cognitivo





Preparación

Modelo

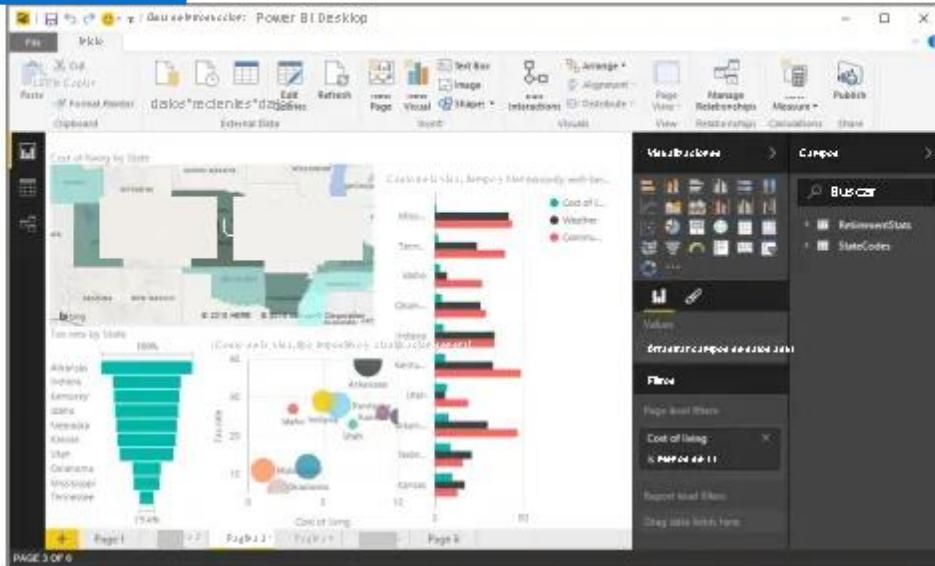
Visualización

Análisis

Administración

TAREAS

Power BI Desktop



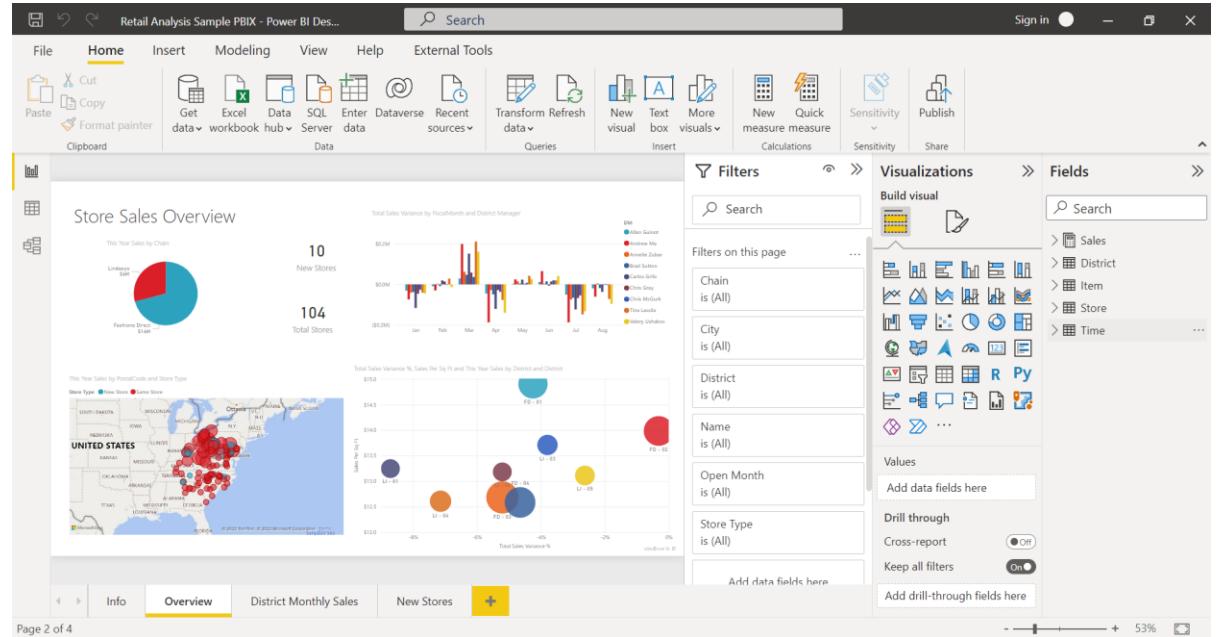
Servicio Power BI



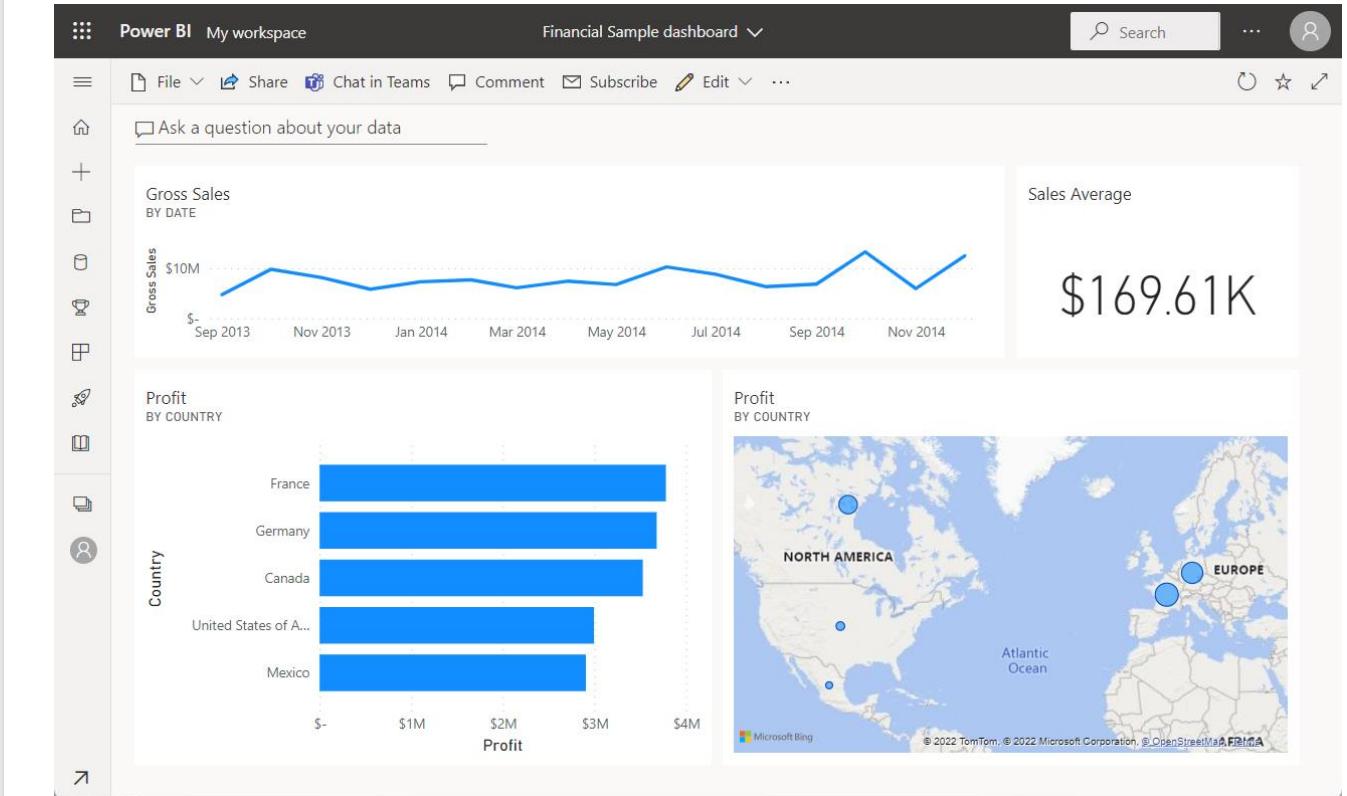
Power BI Mobile

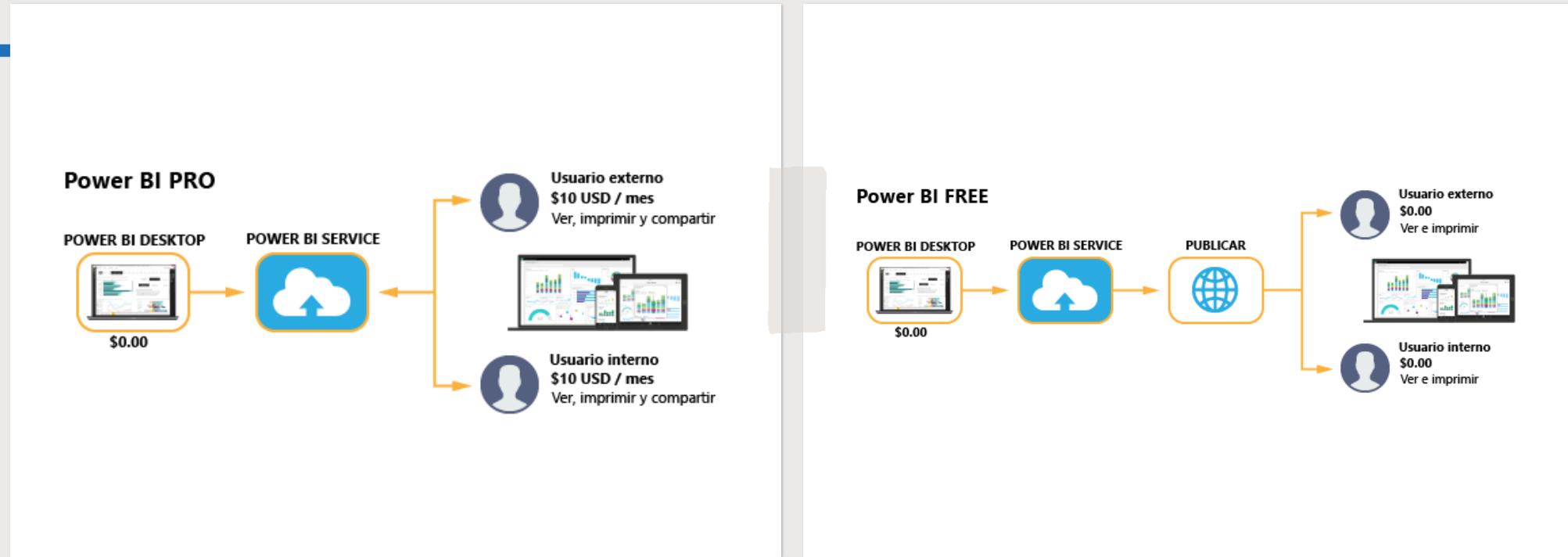


POWER BI DESKTOP

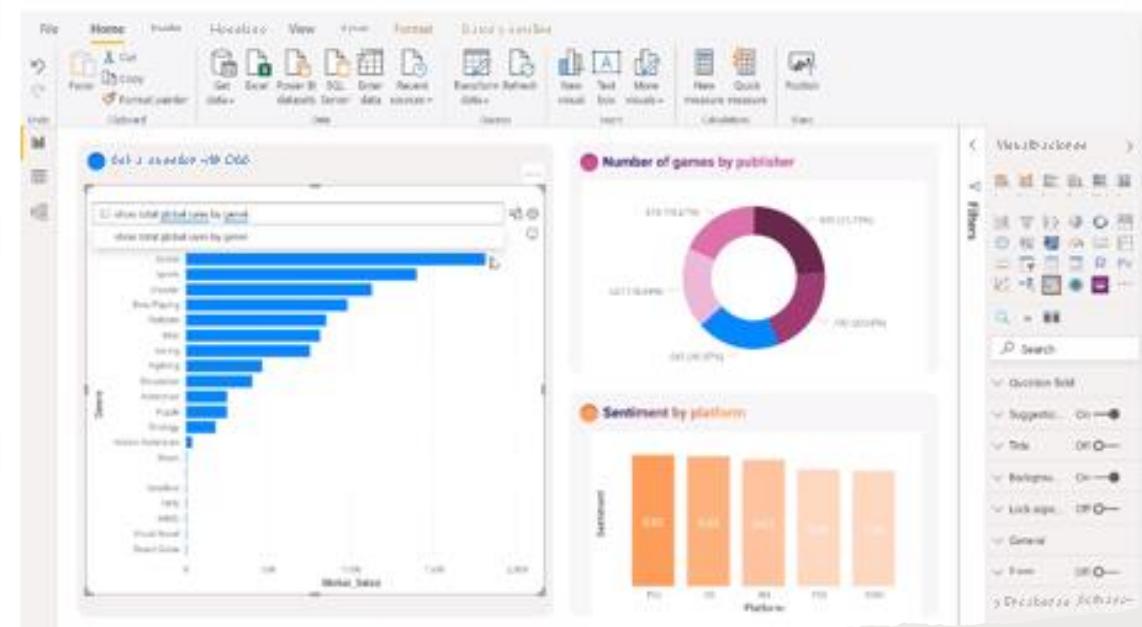


POWER BI SERVICE



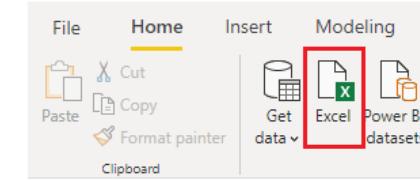
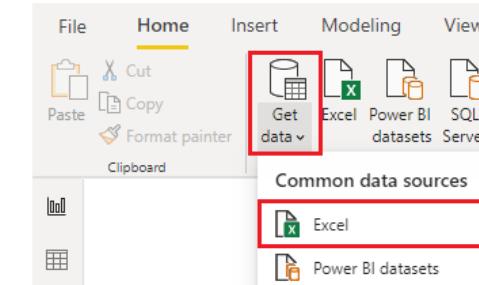


LICENCIAS



FUENTES DE DATOS

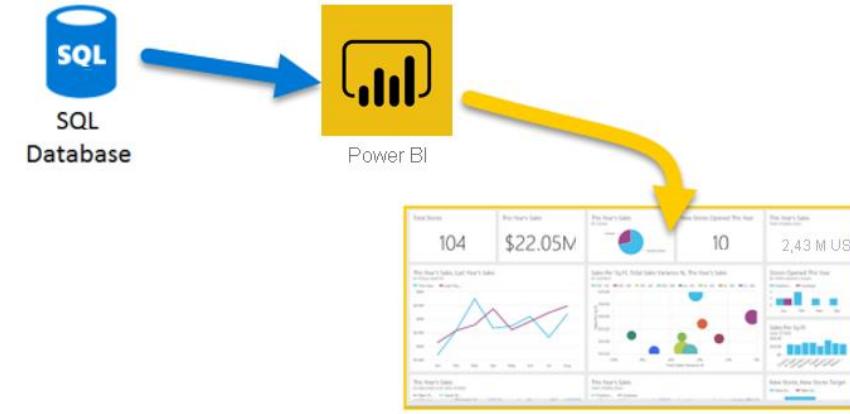
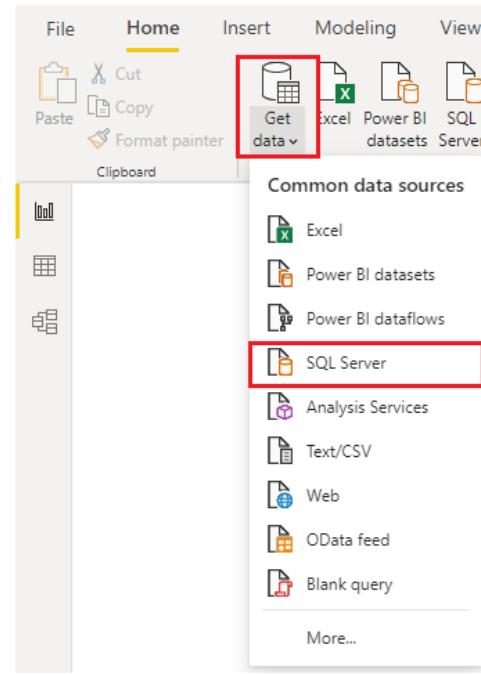
- Obtención de datos de archivo.
- Obtención de datos de orígenes de datos relacionales
- Obtención de datos de una base de datos NoSQL
- Obtención de datos de servicios en línea



OBTENCIÓN DE DATOS DE ARCHIVO

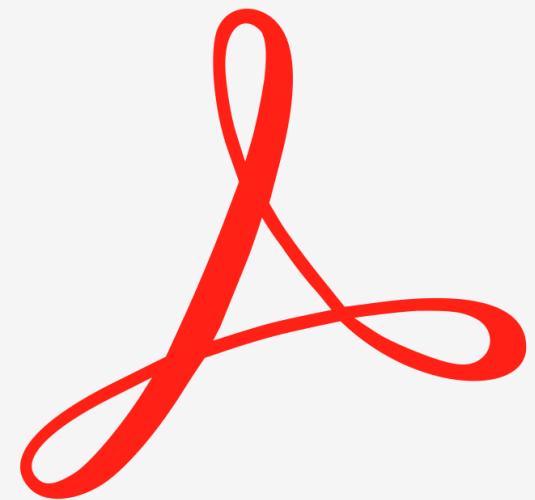
CONEXIÓN A WEB





SQL

PDF

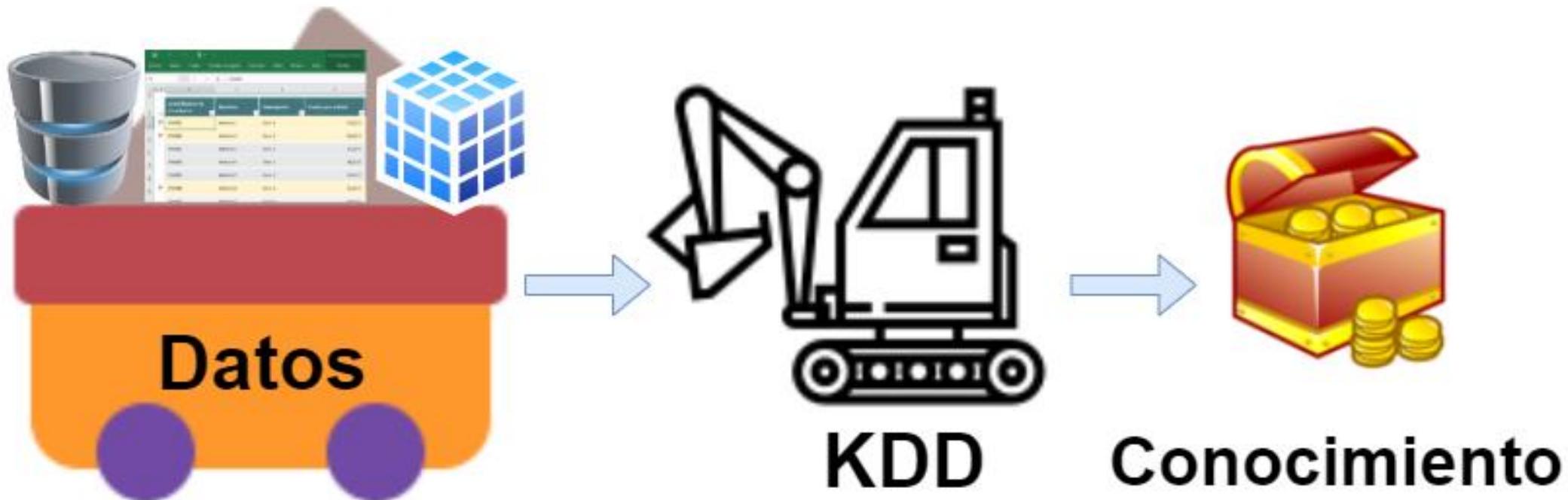


PDF

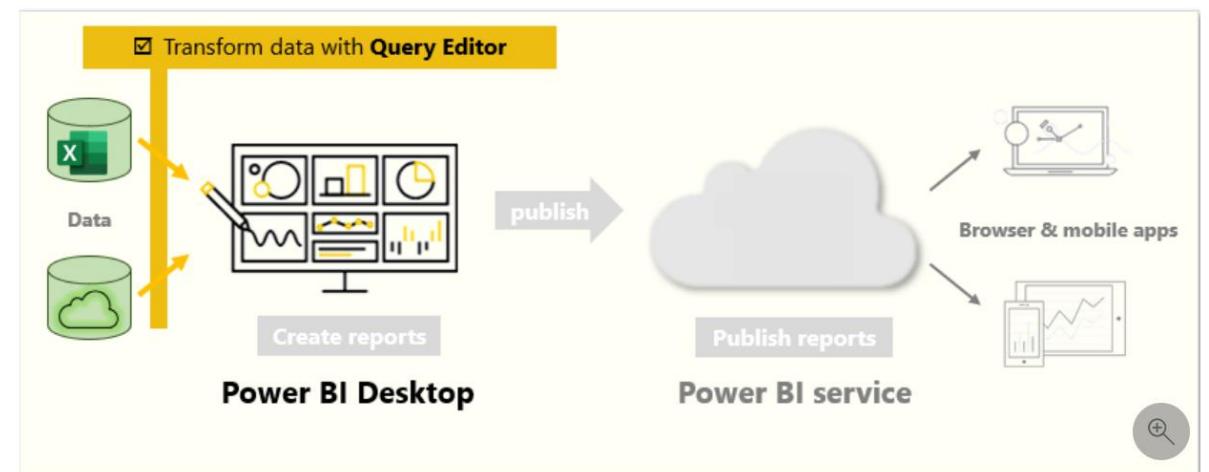
EJERCICIO

- Consume los datos de esta web <https://www.worldometers.info/world-population/population-by-country/>
- Haz un gráfico de barras simple para ver los habitantes por país y comprobar que has ingestado correctamente los datos.

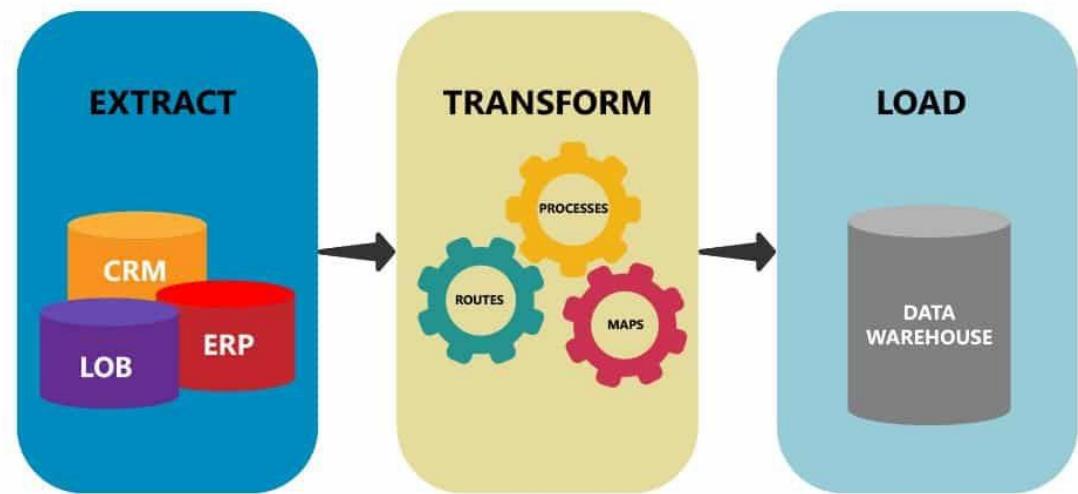
PREPROCESAMIENTO



POWER QUERY



ETL



ETL - Extract, Transform, Load

Search

Display options ▾

 Invoices Order_Details Order_Details_Extendeds Order_Subtotals Orders Orders_Qries Product_Sales_for_1997 Products Products_Above_Average Products_by_Categories Regions Sales_by_Categories Sales_Totals_by_Amounts Shippers Summary_of_Sales_by...

Suppliers

SupplierID	CompanyName	ContactName	ContactTitle	Address
1	Exotic Liquids	Charlotte Cooper	Purchasing Manager	49 Gilbert St.
2	New Orleans Cajun Delights	Shelley Burke	Order Administrator	P.O. Box 78934
3	Grandma Kelly's Homestead	Regina Murphy	Sales Representative	707 Oxford Rd.
4	Tokyo Traders	Yoshi Nagase	Marketing Manager	9-8 Sekimai Musashino-shi
5	Cooperativa de Quesos 'Las Cabras'	Antonio del Valle Saave...	Export Administrator	Calle del Rosal 4
6	Mayumi's	Mayumi Ohno	Marketing Representative	92 Setsuko Chuo-ku
7	Pavlova, Ltd.	Ian Devling	Marketing Manager	74 Rose St. Moonie Ponds
8	Specialty Biscuits, Ltd.	Peter Wilson	Sales Representative	29 King's Way
9	PB Knäckebröd AB	Lars Peterson	Sales Agent	Kaloadagatan 13
10	Refrescos Americanas LTDA	Carlos Diaz	Marketing Manager	Av. das Americanas 12.890
11	Heli Süßwaren GmbH & Co. KG	Petra Winkler	Sales Manager	Tiergartenstraße 5
12	Plutzer Lebensmittelgroßmärkte AG	Martin Bein	International Marketing M...	Bogenallee 51
13	Nord-Ost-Fisch Handelsgesellschaft m...	Sven Petersen	Coordinator Foreign Mark...	Frahmredder 112a
14	Formaggi Fortini s.r.l.	Elio Rossi	Sales Representative	Viale Dante, 75
15	Norske Meierier	Beate Vileid	Marketing Manager	Hatlevagen 5
16	Bigfoot Breweries	Cheryl Saylor	Regional Account Rep.	3400 - 8th Avenue Suite 210
17	Svensk Sjöföda AB	Michael Björn	Sales Representative	Brovallavägen 231
	's-Statiques	Guylène Nodier	Sales Manager	203, Rue des Francs-Bourgeois
		Robb Merchant	Wholesale Account Agent	Order Processing Dept. 2100 Paul Re
		Leka	Owner	471 Serangoon Loop, Suite #402
			Sales Manager	Lyngbysild Fiskebakken 10

VENTAJAS

Cancel

Create

EDITOR AVANZADO

Sales Orders

Display Options...

```
let
    Source = Sql.Database("localhost", "tsqlv4"),
    Sales_Orders = Source{[Schema="Sales",Item="Orders"]}[Data],
    #"Split Column by Delimiter" = Table.SplitColumn(Sales_Orders, "shipaddress", Splitter.SplitTextByDelimiter(",", QuoteStyle.Csv), {"shipaddress.1", "shipaddress.2"}),
    #"Changed Type" = Table.TransformColumnTypes(#"Split Column by Delimiter",{{"shipaddress.1", type text}, {"shipaddress.2", type text}})
in
    #"Changed Type"
```

No syntax errors have been detected.

Done Cancel

Power Query - Edit queries

1

Add column View Help

Manage parameters Refresh Advanced editor Choose columns Remove columns Keep rows Remove rows Sort Data type: Text Use first row as headers Replace values Merge queries Append queries Combine files Map to entity CDM Insights

Parameters Query Manage columns Reduce rows Sort Transform Combine CDM Insights

Source{[Name = "Customers", Signature = "table"]}[Data]

	CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region
1	ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	null
2	ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitución 2222	México D.F.	null
3	ANTON	Antonio Moreno Taquería	Antonio Moreno	Sales Representative	Mataderos 2312	México D.F.	null
4	AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	null
5	BERGS	Berglunds snabbköp	Christina Berglund	Order Administrator	Berguvsvägen 8	Luleå	null
6	BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57	Mannheim	null
7	BLONP	Blondesddsl père et fils	Frédérique Citeaux	Marketing Manager	24, place Kléber	Strasbourg	null
8	BOLID	Bólido Comidas preparadas	Martín Sommer	Owner	C/ Araquil, 67	Madrid	null
9	BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseille	null
10	BOTTM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tswassen Blvd.	Tswassen	BC
11	BSBEV	B's Beverages	Victoria Ashworth	Sales Representative	Fauntleroy Circus	London	null
12	CACTU	Cactus Comidas para llevar	Patricia Simpson	Sales Agent	Cerrito 333	Buenos Aires	null
13	CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager	Sierras de Granada 9993	México D.F.	null
		Chop-suey Chinese		Owner	Hauptstr. 29	Bern	null
					Av. dos Lusíadas, 23	Sao Paulo	SP
					Berkeley Gardens 12 Brewery	London	null
					21	Aachen	null
					Stanes	Nantes	null

Query settings

Name: Customers

Entity type: Custom

Applied steps:

- Source
- Navigation

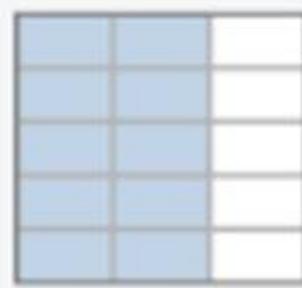
Step Cancel Save

EDITOR DE POWER QUERY

ADMINISTRAR COLUMNAS



Power BI



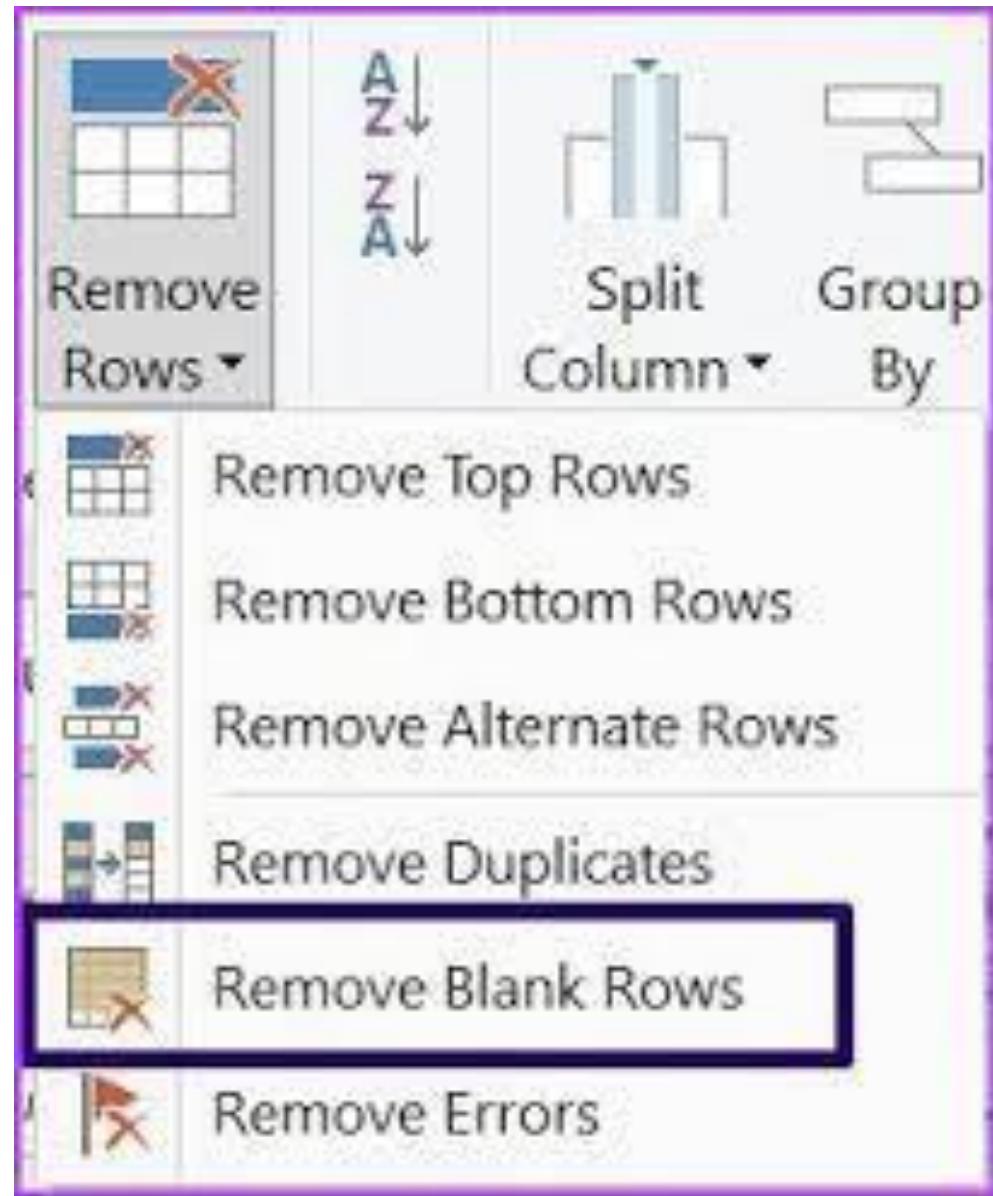
Elegir
columnas ▾



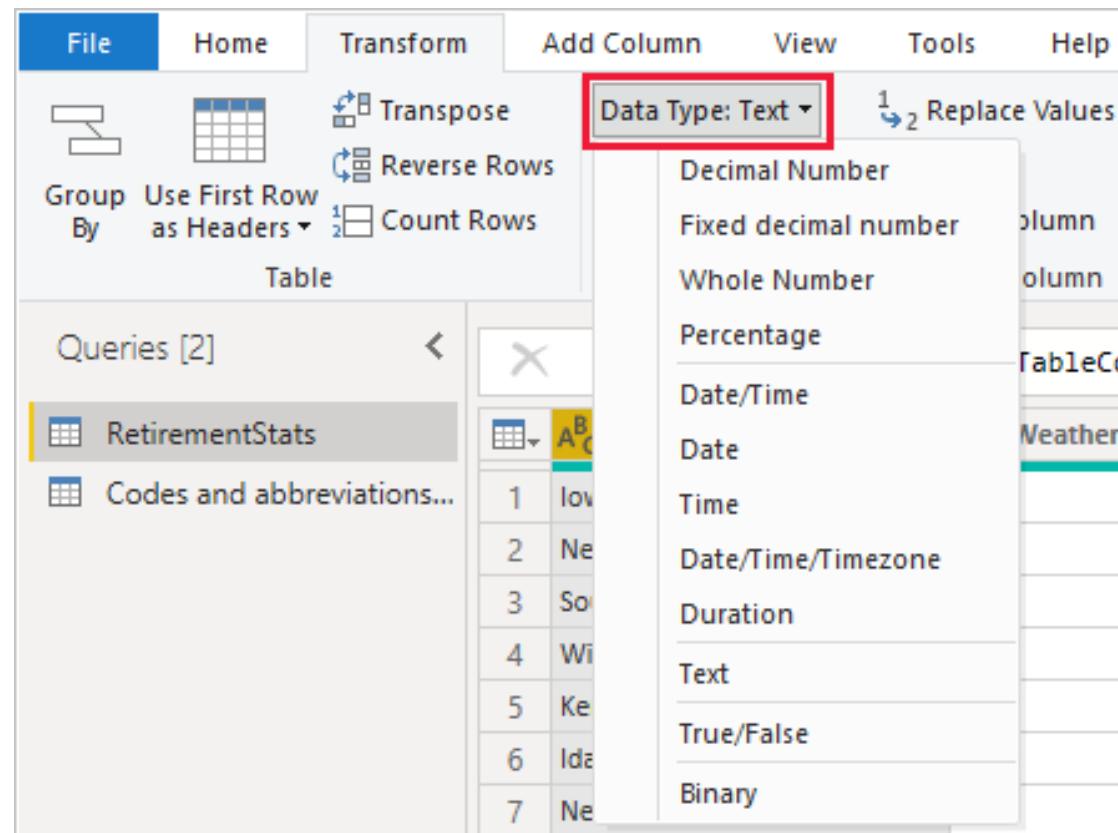
Quitar
columnas ▾

ELIMINAR COLUMNAS

ELIMINAR FILAS



CONVERTIR TIPO DE DATOS



DIVIDIR COLUMNAS

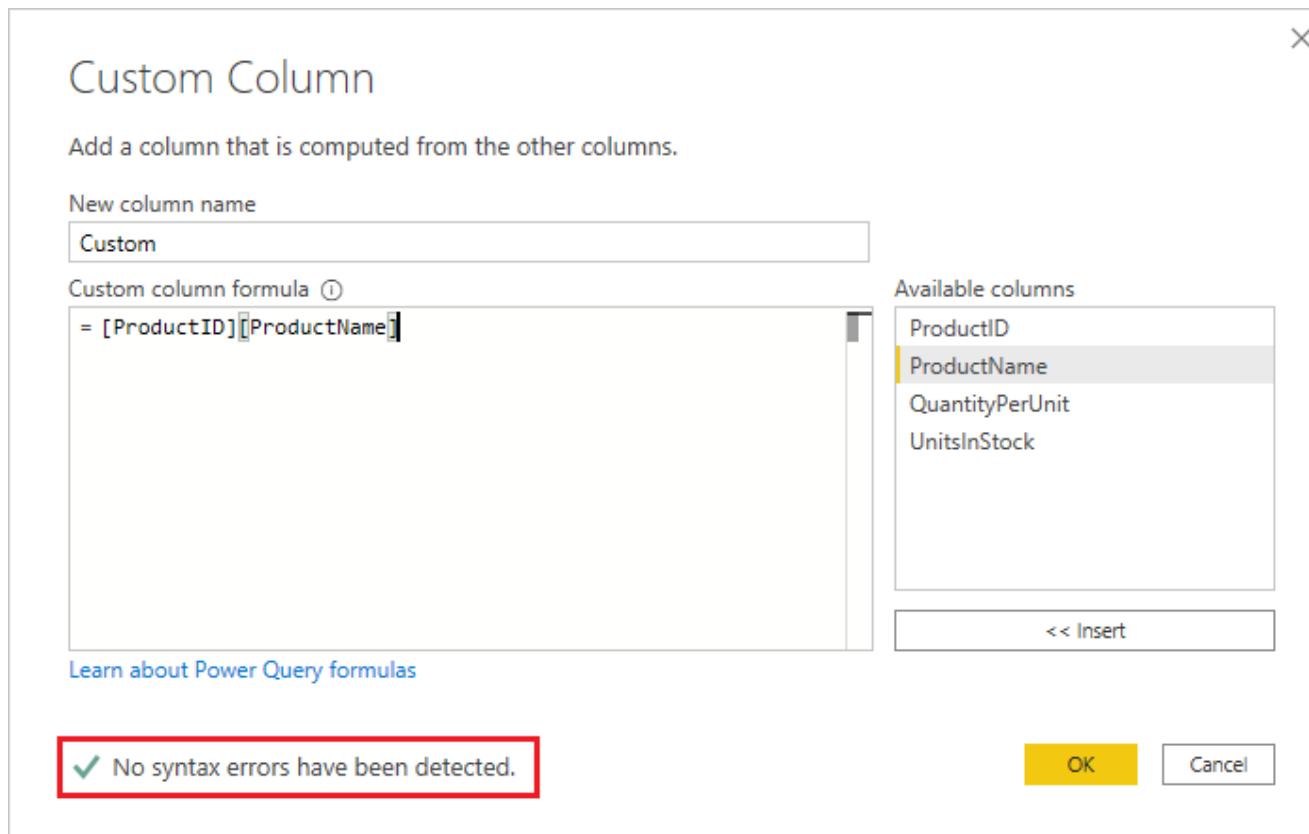
The screenshot shows the Microsoft Power Query Editor interface. The top navigation bar includes File, Home, Transform (selected), Add Column, View, Tools, and Help. The Transform tab has several icons: Group By, Use First Row as Headers, Transpose, Reverse Rows, Count Rows, Detect Data Type, Fill, Move, Rename, Pivot Column, Unpivot Columns, Convert to List, Split Column, Format, Merge Columns, Extract, and Parse. The main area displays a table with four rows and one column labeled "Column1". The formula bar shows the query: `= Table.FromRows(Json.Document(Binary.Decompress(Binary.FromText`. A context menu is open over the "Split Column" icon, listing options: By Delimiter, By Number of Characters, By Positions (which is highlighted with a red box), By Lowercase to Uppercase, By Uppercase to Lowercase, By Digit to Non-Digit, and By Non-Digit to Digit.

Column1
PA000420190504150
US94242019112487489
PA4144202001123758
US84292020031467895

= Table.FromRows(Json.Document(Binary.Decompress(Binary.FromText

- By Delimiter
- By Number of Characters
- By Positions
- By Lowercase to Uppercase
- By Uppercase to Lowercase
- By Digit to Non-Digit
- By Non-Digit to Digit

COLUMNA PERSONALIZADA



REEMPLAZAR VALORES

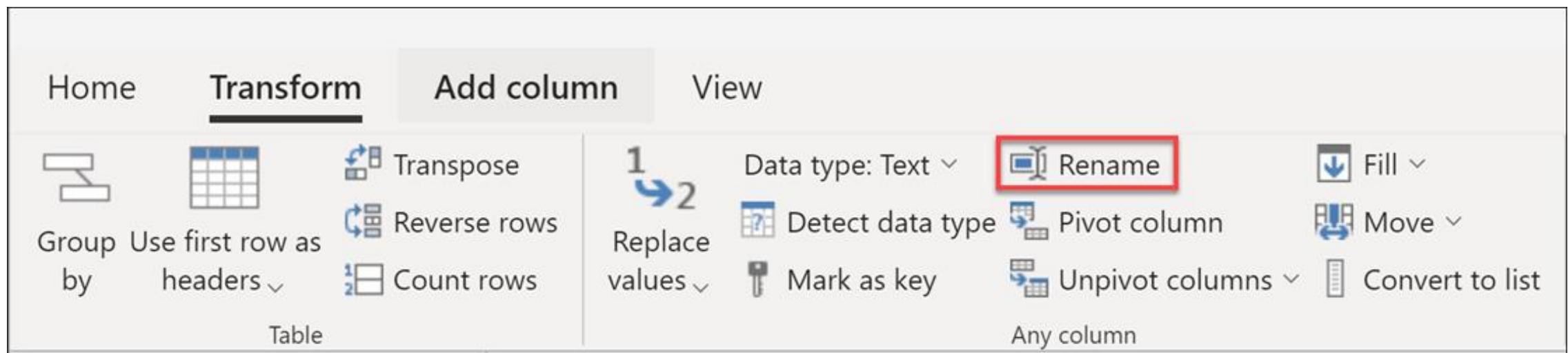
The screenshot shows the Power BI Data Editor interface. A context menu is open over a table containing four rows of data. The table has three columns: Account ID, Category Name, and Sales Goal. The data is as follows:

Account ID	Category Name	Sales Goal
1	120024 Category Name: Prime	
2	120025 Category Name: Main	
3	120026 Category Name: Base	
4	120027 Category Name: Lower	

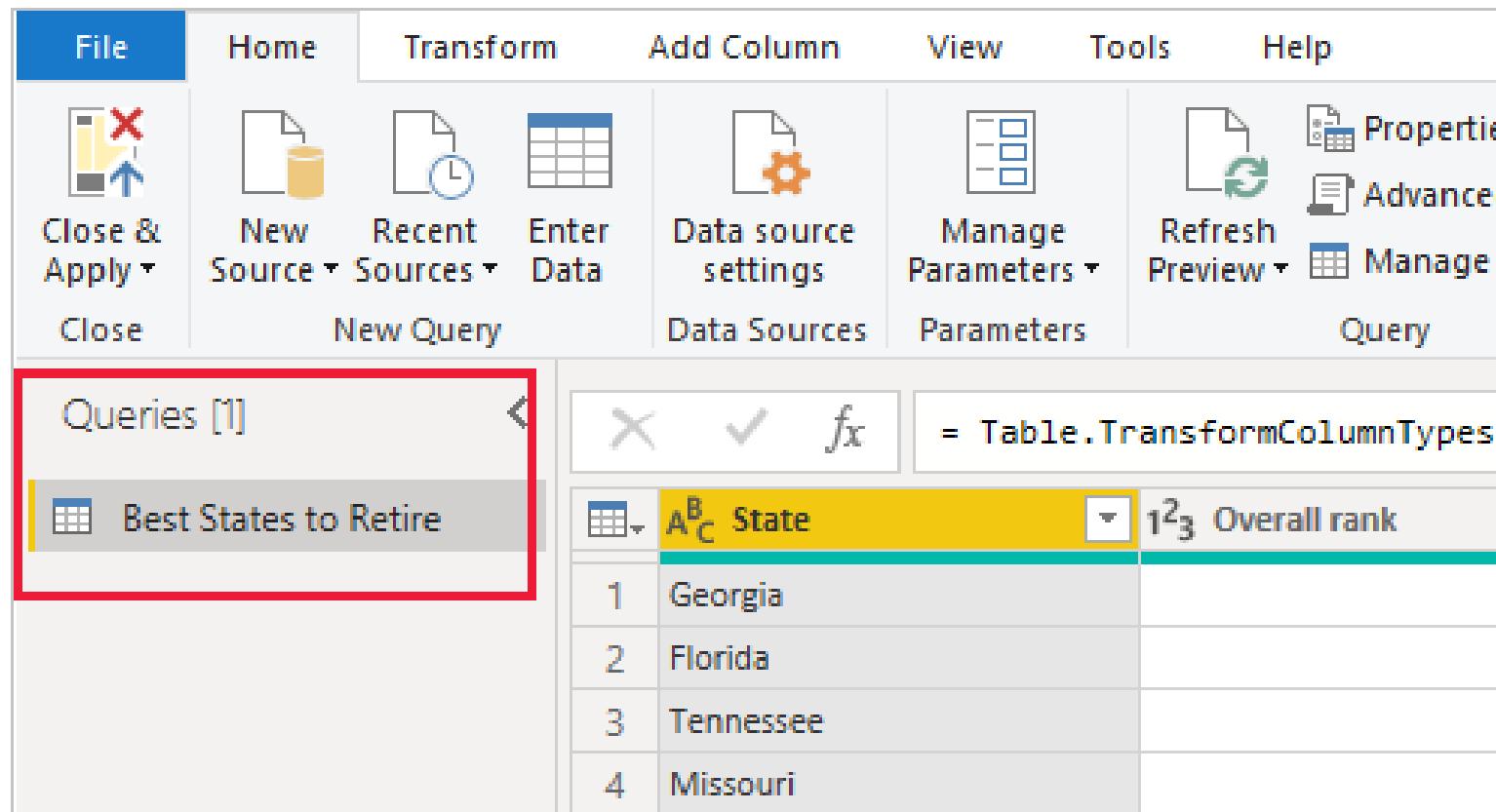
The context menu, located on the right side of the screen, contains various options for data manipulation. The 'Replace Values...' option is highlighted with a red box.

- Copy
- Remove
- Remove Other Columns
- Duplicate Column
- Add Column From Examples...
- Remove Duplicates
- Remove Errors
- Change Type
- Transform
- Replace Values... **1 2**
- Replace Errors...
- Group By...
- Fill
- Unpivot Columns
- Unpivot Other Columns
- Unpivot Only Selected Columns
- Rename...
- Move
- Drill Down
- Add as New Query

CAMBIAR NOMBRE DE COLUMNAS



APLICAR CAMBIOS



The screenshot shows the Microsoft Power BI desktop interface. The ribbon menu at the top includes File, Home, Transform, Add Column, View, Tools, and Help. Below the ribbon, there are several icons: Close & Apply, New Source, Recent Sources, Enter Data, Data source settings, Manage Parameters, Refresh Preview, Properties, Advance, and Manage. The 'Home' tab is currently selected. In the bottom left, a list of 'Queries [1]' is shown, with one item highlighted: 'Best States to Retire'. This item is also highlighted with a red box. To the right of the queries, a preview of the data is displayed in a table format. The table has two columns: 'State' and 'Overall rank'. The data rows are: 1 Georgia, 2 Florida, 3 Tennessee, and 4 Missouri. The 'State' column is bolded.

	State	Overall rank
1	Georgia	
2	Florida	
3	Tennessee	
4	Missouri	

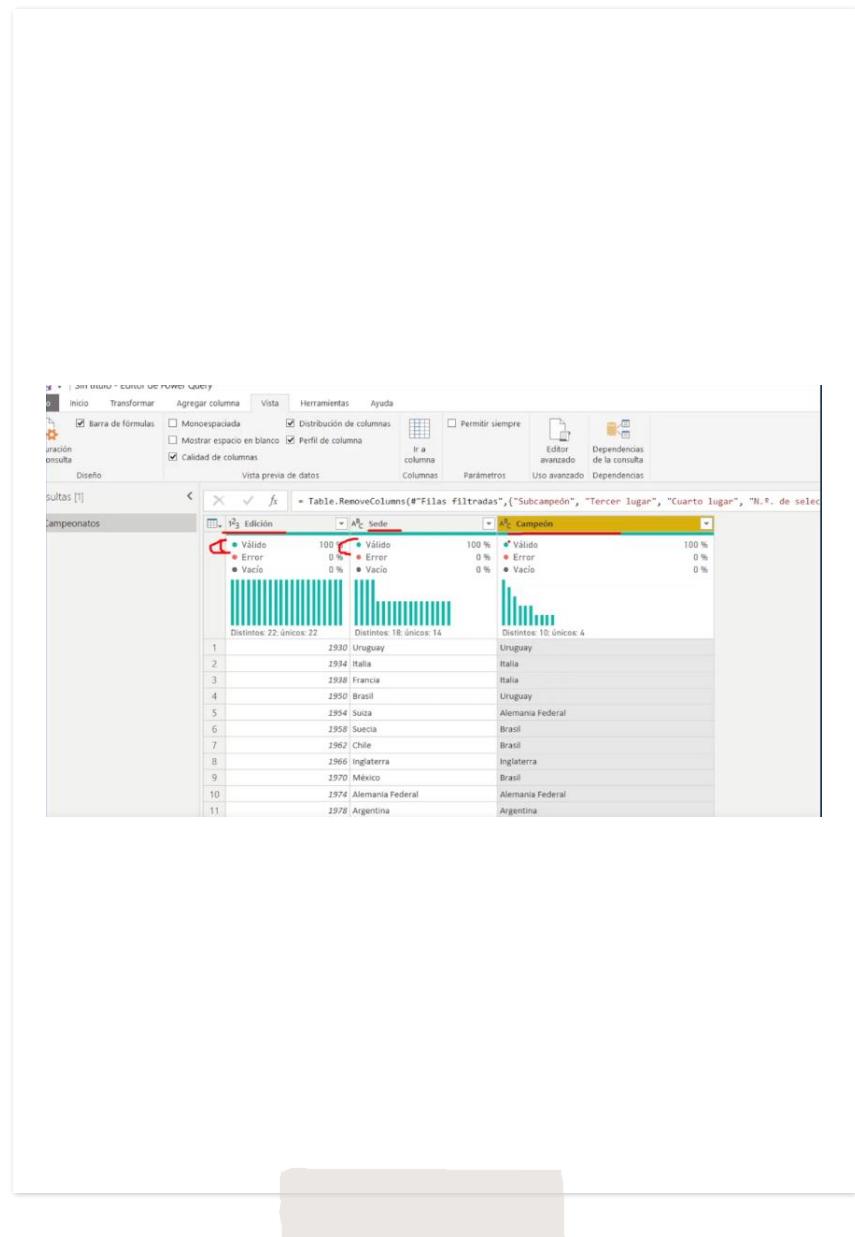
EJERCICIO

Obtener información de esta url:
https://es.wikipedia.org/wiki/Copa_Mundial_de_F%C3%BAtbol e importar la tabla de campeonatos. Generar una base de datos que permita identificar el equipo con mas campeonatos y la sede con mas mundiales realizados, debe de quedar como la adjunta

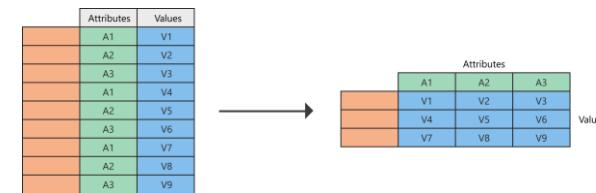
Los requisitos de la tabla son:

- La calidad de las columnas > 90%
- No deben haber columnas ni registros vacíos
- Eliminar columnas innecesarias
- Garantizar que los datos están de acuerdo a su tipo
- Reemplazar valores
- Cambiar nombre de columnas

Como plus, podeis generar un grafico con cada una de esas informaciones



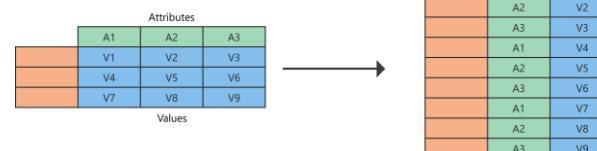
	A ^B _C Country	Date	1 ² ₃	Value
1	USA	6/1/2020		785
2	USA	7/1/2020		450
3	USA	8/1/2020		567
4	Canada	6/1/2020		357
5	Canada	7/1/2020		421
6	Canada	8/1/2020		254
7	Panama	6/1/2020		20
8	Panama	7/1/2020		40
9	Panama	8/1/2020		80



	A ^B _C Country	1 ² ₃ 6/1/2020	1 ² ₃ 7/1/2020	1 ² ₃ 8/1/2020
1	Canada	357	421	254
2	Panama	20	40	80
3	USA	785	450	567

DINAMIZACION DE COLUMNAS

	A ^B _C Country	1 ² ₃ 6/1/2020	1 ² ₃ 7/1/2020	1 ² ₃ 8/1/2020
1	USA	785	450	567
2	Canada	357	421	254
3	Panama	20	40	80



	A ^B _C Country	A ^B _C Attribute	1 ² ₃ Value
1	USA	6/1/2020	785
2	USA	7/1/2020	450
3	USA	8/1/2020	567
4	Canada	6/1/2020	357
5	Canada	7/1/2020	421
6	Canada	8/1/2020	254
7	Panama	6/1/2020	20
8	Panama	7/1/2020	40
9	Panama	8/1/2020	80

ANULAR DINAMIZACION DE COLUMNAS

AGRUPAR DATOS

The screenshot shows the Power BI Advanced Editor interface. At the top, the ribbon toolbar includes options like Data source settings, Manage Parameters, Refresh Preview, Properties, Advanced Editor, and various data management tools such as Choose Columns, Remove Columns, Keep Rows, Remove Rows, Reduce Rows, Sort, Split Column, Group By, and Transform. A red circle highlights the 'Group By' button in the ribbon.

The main area displays a table with three rows:

	description	Table.Date	1.2 SUM value
1	Amazon	1/1/2020	6
2	Amazon	1/2/2020	7
3	Morrisons	1/2/2020	15

A red arrow points from the 'Group By' button in the ribbon down to the 'Group By' dialog box.

Group By
Specify the column(s) to group by and one or more outputs.
 Basic Advanced

description
Table.Date
Add grouping

New column name: SUM_value
Operation: Sum
Column: Table.value
Add aggregation

OK Cancel

CONSOLIDAR CONSULTAS

Merge

Select tables and matching columns to create a merged table.

S&P 500 Component Stocks - List of...

Ticker symbol	Company	SEC filings	GICS Sector	GICS Sub Industry
MMM	3M Company	reports	Industrials	Industrial Conglomer
ABT	Abbott Laboratories	reports	Health Care	Health Care Equipment
ABBV	AbbVie	reports	Health Care	Pharmaceuticals
ANF	Abercrombie & Fitch Company A	reports	Consumer Discretionary	Apparel, Accessories
ACE	ACE Limited	reports	Financials	Property & Casualty

NYSE 2009 - daily

exchange	stock_symbol	date	stock_price_close	stock_gain_loss_dollar	stock_gain_loss_perce
NYSE	AA	39815	12.11	0	-0.0
NYSE	AA	39818	11.86	-0.25	-0.0
NYSE	AA	39819	12.12	0.26	0.0
NYSE	AA	39820	10.89	-1.23	-0.0
NYSE	AA	39821	11.36	0.47	0.0

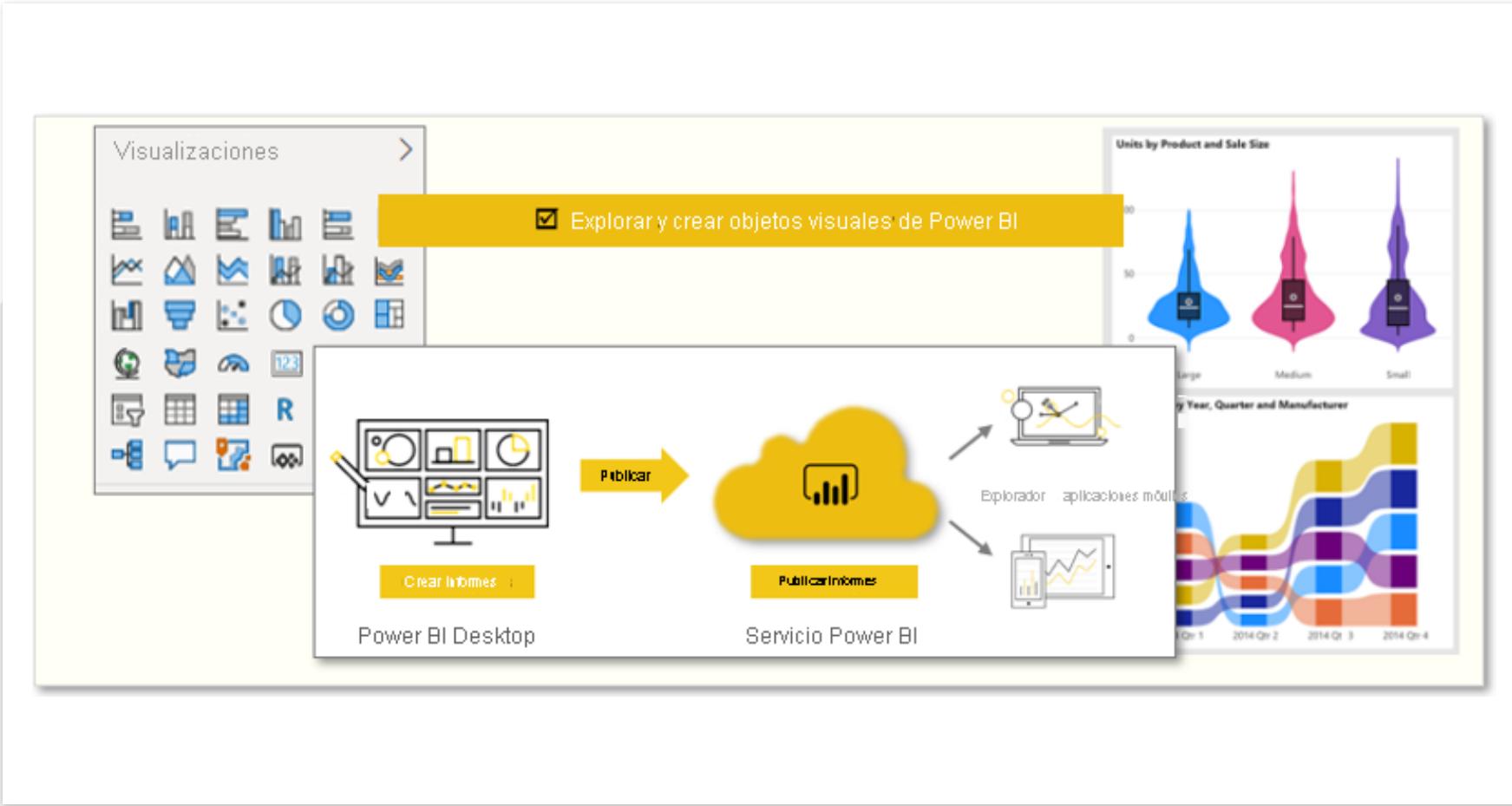
Only include matching rows

OK Cancel

EJERCICIO

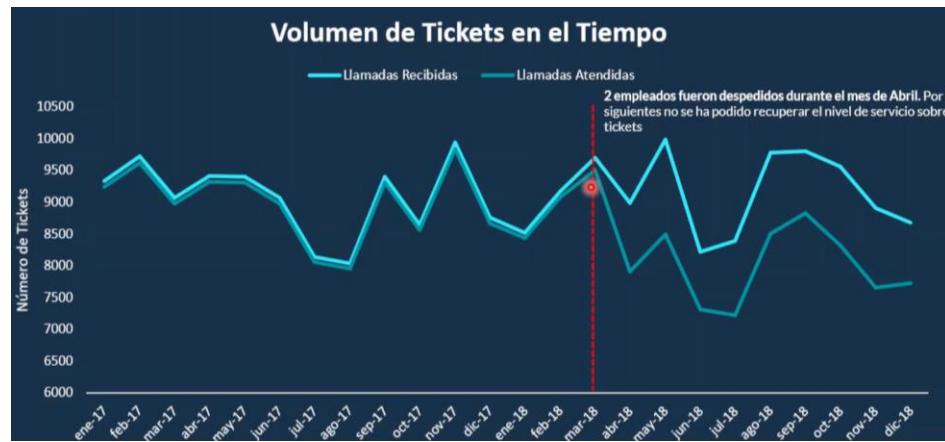
- Utilizando los datos de la carpeta POBLACION generar la integración y combinación de datos para contabilizar las personas por cada año y sexo
- Aplicar preprocesamiento, eliminar columnas y registros innecesarios, utilizar dinamización de columnas, y separa columnas

123 Año	A8C Sexo	1.2 Cantidad de Personas
● Válido ● Error ● Vacío	● Válido ● Error ● Vacío	● Válido ● Error ● Vacío
100 % 0 % 0 %	100 % 0 % 0 %	100 % 0 % 0 %
Distintos: 4; únicos: 0	Distintos: 2; únicos: 0	Distintos: 8; únicos: 8
1	2000 Hombres	47592253
2	2000 Mujeres	49891159
3	2005 Hombres	50249955
4	2005 Mujeres	53013433
5	2010 Hombres	54855231
6	2010 Mujeres	57481307
7	2020 Hombres	61473390
8	2020 Mujeres	64540634

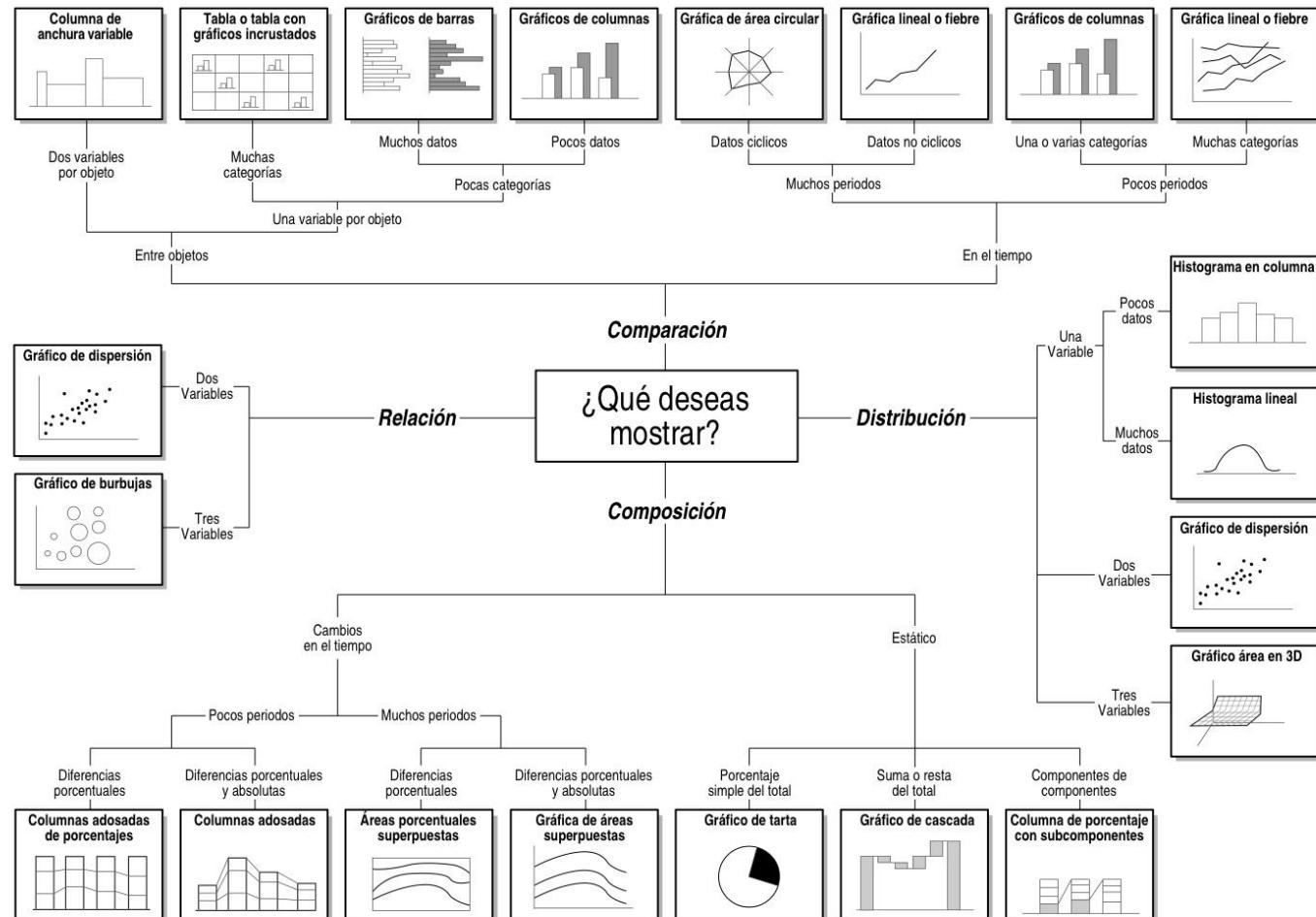


VISUALIZACIONES

ELECCIÓN DEL BUEN GRÁFICO



¿Qué gráfico elegir?



CAMPOS Y FORMATO

The screenshot shows the Power BI interface with the 'Visualizations' and 'Fields' panes open. The 'Visualizations' pane on the left contains a grid of icons representing various chart types, with the 'Axis' icon highlighted by a red box. Below the grid are three dropdown menus: 'Month', 'Legend', and 'Manufacturer'. The 'Fields' pane on the right lists data sources and their fields, with 'SalesFact' selected. Under 'SalesFact', 'Date' and 'Geo' are expanded, showing their respective fields. Under 'Manufacturer', 'Product' is expanded, showing 'Category' and 'Count of Prod...'. A search bar is also present in the 'Fields' pane.

Visualizations

Filters

Axis

Month

Legend

Manufacturer

Fields

SalesFact

Date

Geo

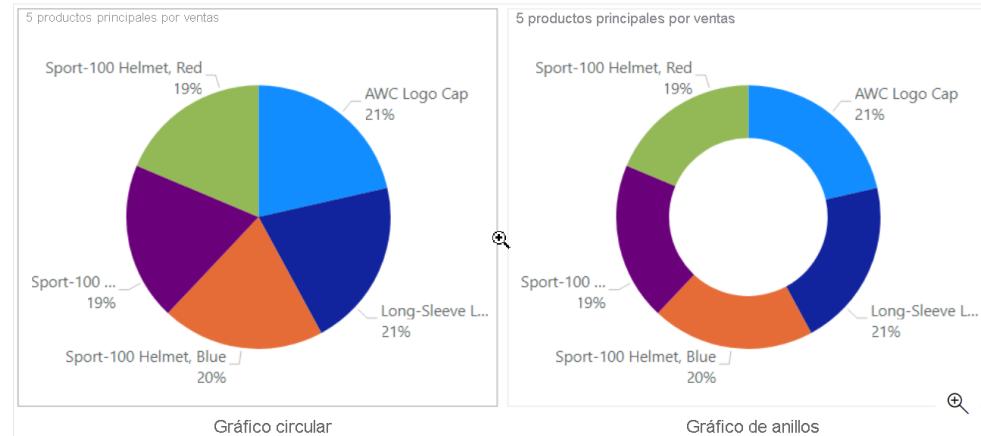
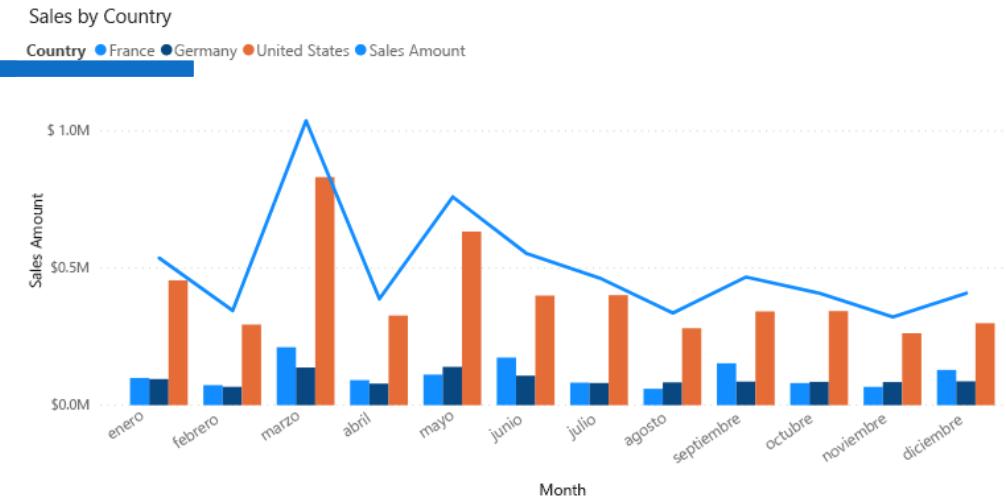
Manufacturer

Product

Category

Count of Prod...

Search



País Importe de ventas

Estados Unidos	\$7,390,464
France	\$773,445
Alemania	\$493,628
Total	\$8,550,077

Visualizaciones Campos

Filtros

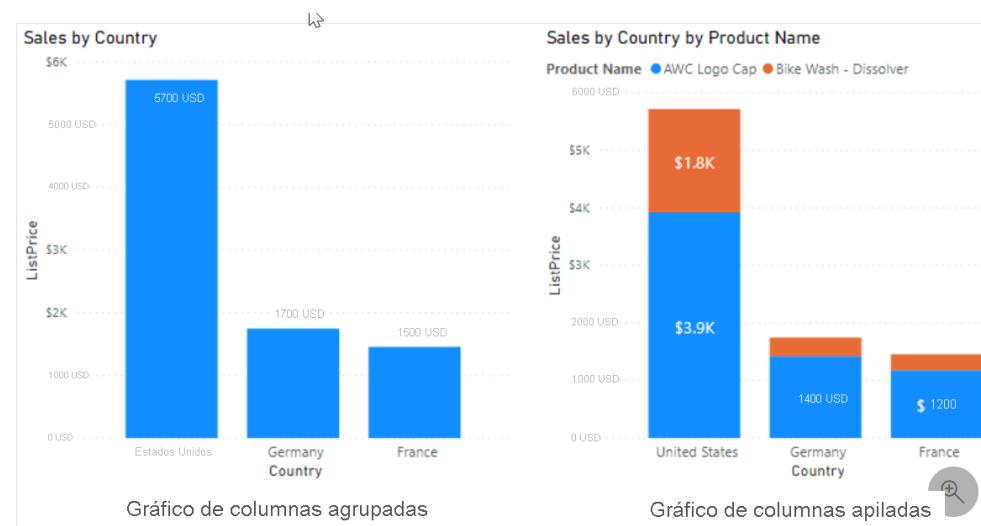
Territorio

- Ciudad
- Ciudad (grupos)
- Country** (selected)
- Europe
- Group
- Norte America
- Other

Valores

País Importe de ventas

Importe de ventas Importe...



The screenshot shows two windows side-by-side. On the left is the 'Visualizations' pane from Power BI, showing various visualizations like Date, Geography, Manufacturer, Product, and Sales. A red arrow points from the 'Get more visuals' button in the 'Visualizations' pane to the 'Add' button on the right. On the right is the 'AppSource' page for the 'Bullet Chart' app by Microsoft Corporation. The 'Add' button is highlighted with a red box. Other visible elements include the search bar, navigation links, and the 'Overview' and 'Ratings + reviews' sections.

Visualizations > Fields

Build visual

Get more visuals

Import a visual from a file

Remove a visual

Restore default visuals

AppSource | Apps for Power BI visuals

Apps

Bullet Chart

Microsoft Corporation

3.6 (36)

PBI Certified

Overview Ratings + reviews

A bar chart with extra visual elements

PERSONALIZADO



R & PYTHON

Date

Año

Trimestre

Month

Día

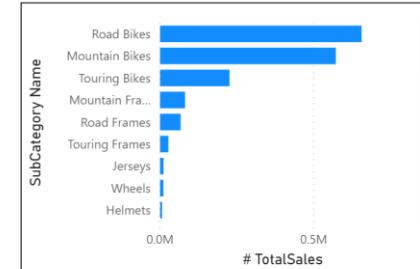
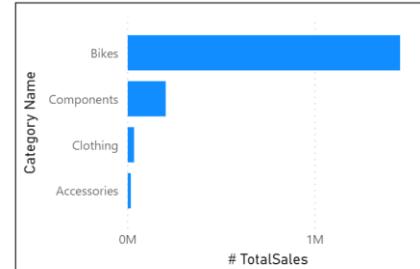
✓ ✗

✗

✗

✗

✗



JERARQUIAS

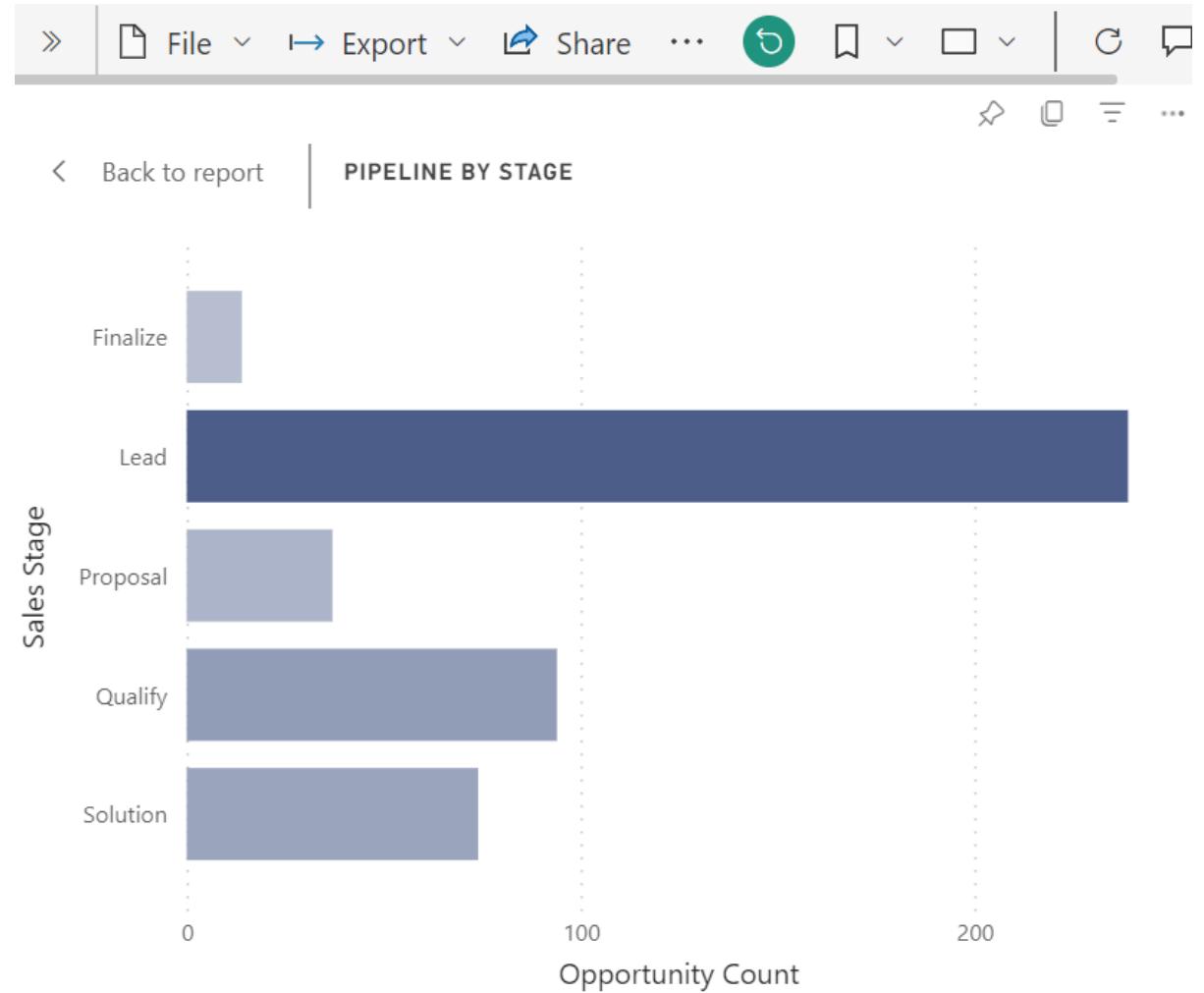


EJERCICIO

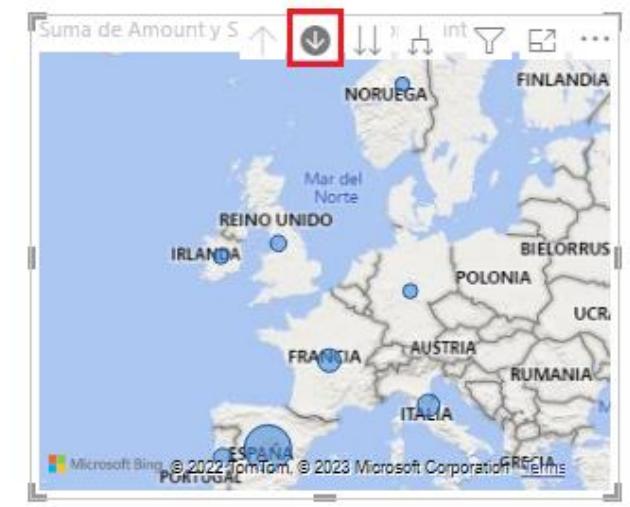
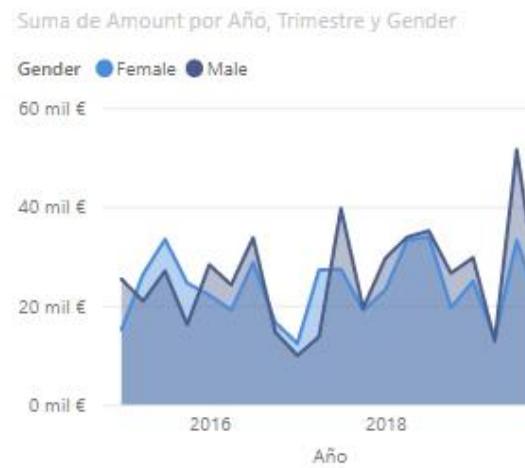
Usando la base de datos de FIFA 23, (extraída de Kaggle) en formato CSV genera las siguientes visualizaciones:

- Grafico de columnas que nos permita identificar las nacionalidades mas frecuentes de los jugadores
- Grafico de barras que permita identificar que clubes aportan mas jugadores al listado
- Grafico que identifique la cantidad de jugadores que se han unido al juego año a año, usa la columna [Joined On]
- Plus: Usar imagener de URL para la segmentación o visualización de datos. Mostrar una tabla que permita tener la imagen del jugador con datos básicos del mismo

ORDENAR GRAFICOS



NAVEGAR EN PROFUNDIDAD

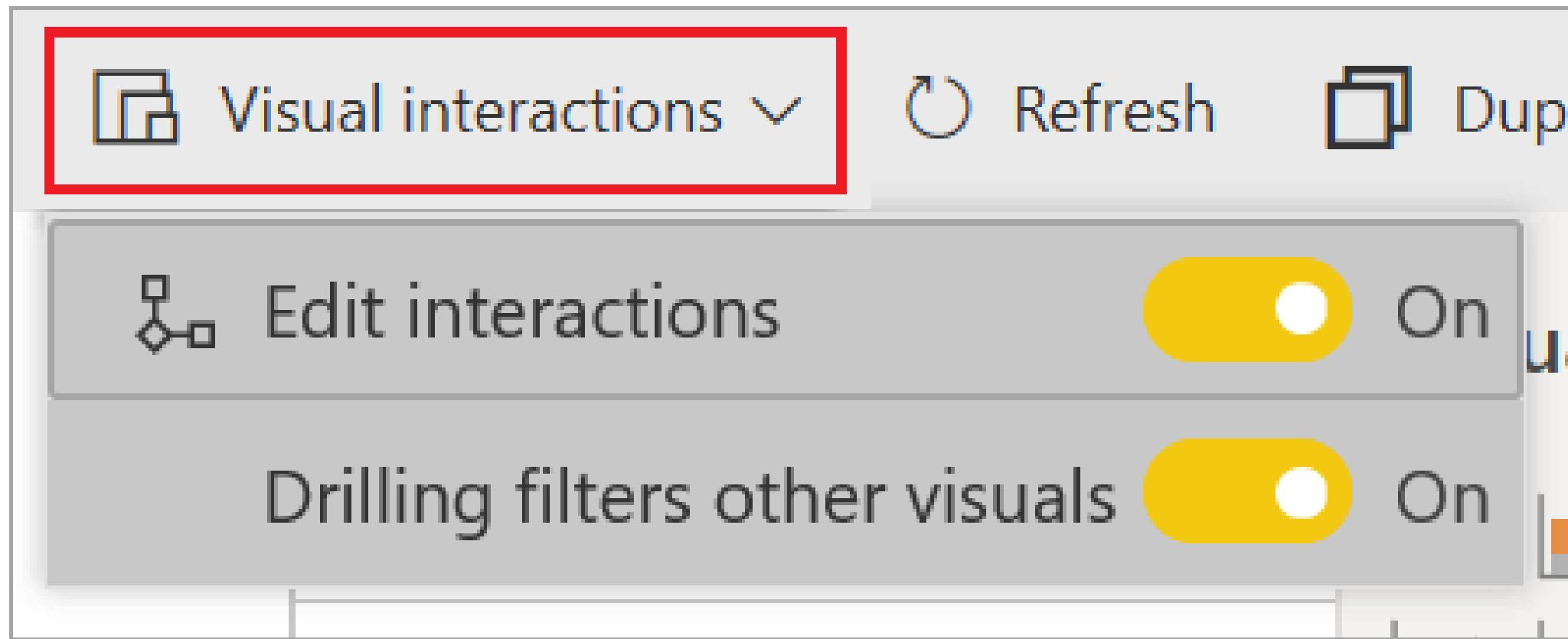


SEGMENTACIÓN

The screenshot shows a user interface for segmenting data across four categories: Year, Category, Region, and Age.

- Año:** A horizontal navigation bar with tabs for 2016, 2017, 2018, and 2019. The 2018 tab is selected and highlighted in dark gray.
- Categoría:** A list of product categories with corresponding color-coded squares:
 - Accessories (light gray)
 - Bikes (dark gray)
 - Clothing (light gray)
 - Components (light gray)
- Comarca:** A dropdown menu set to "Todas".
- Edad:** An age range selector with two input fields containing "33" and "103", connected by a horizontal slider.

INTERACCIÓN ENTRE VISUALIZACIONES

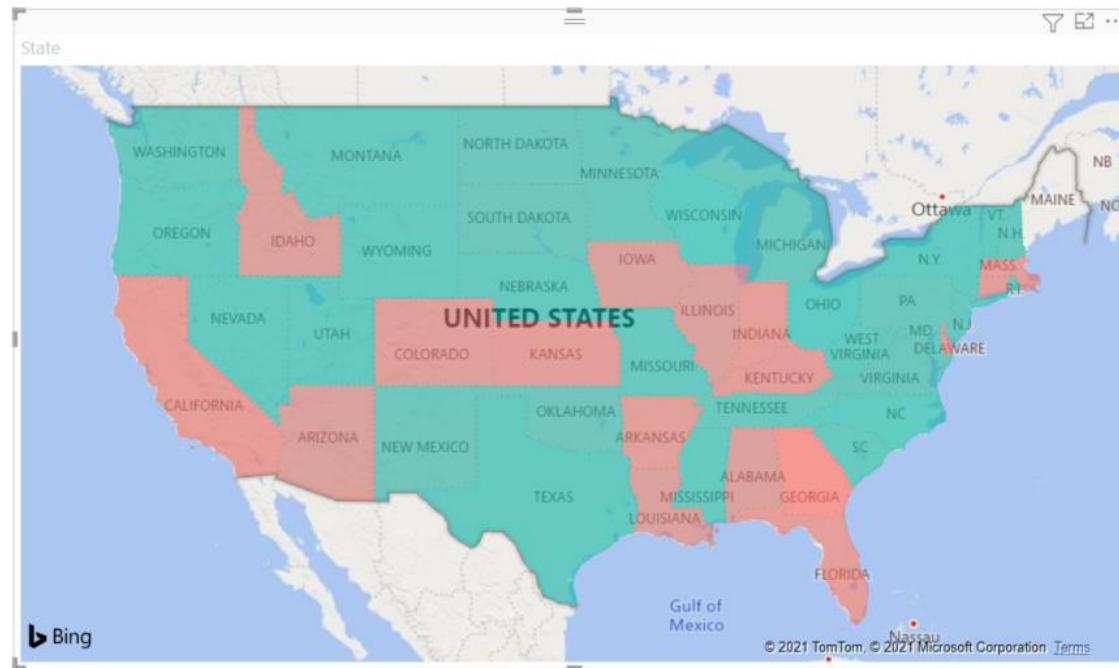


EJERCICIO

Utilizad la BBDD de SuperStore
Dataset.xlsx. Generar visualizaciones de
filtro cruzado entre los distintos elementos

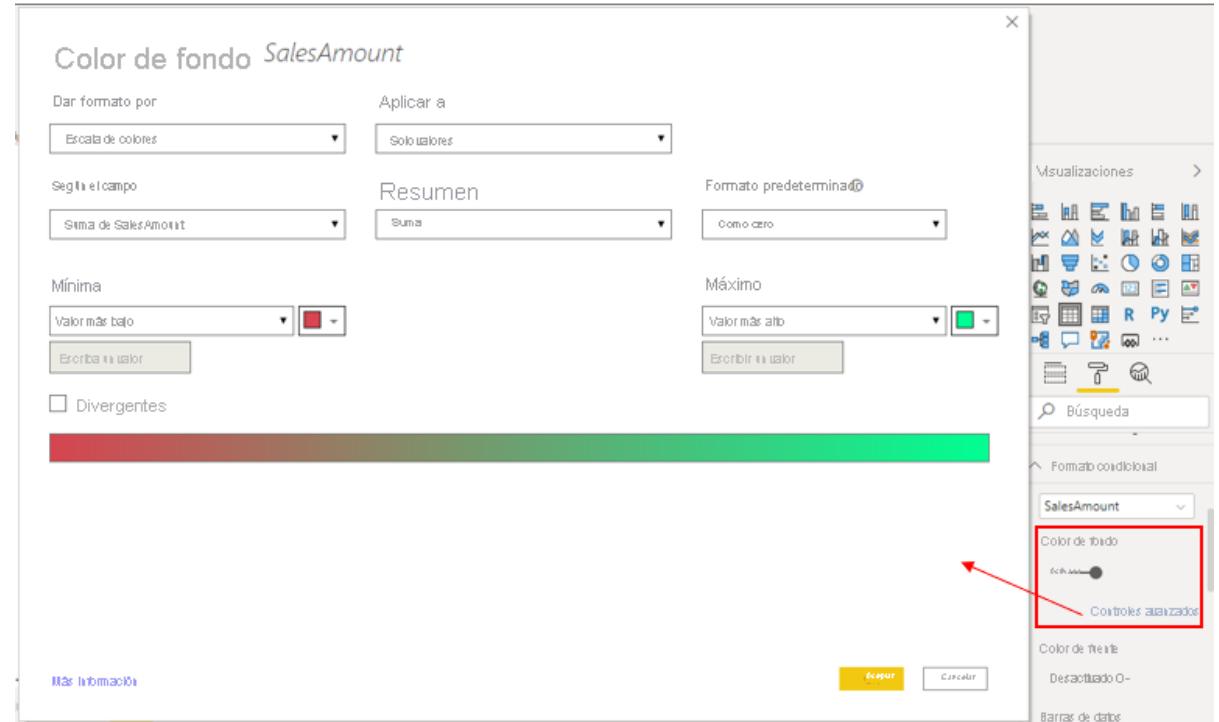
- ¿Cuál es la cantidad de ventas de “Furniture” para el estado de New York?
- ¿Cuál es el producto de mayor demanda en el segmento de “Home Office”?
- ¿En que segmento y estado se vende con mayor frecuencia el segmento de Corporate?





USO DE MAPAS

FORMATO CONDICIONAL



FILTROS

The screenshot shows the Power BI 'Filters' pane on the left and the 'Fields' pane on the right.

Filters pane:

- Visualizaciones:** Shows various visualization icons.
- Campos:** Shows a list of fields:
 - SalesDataByRegi...** (selected)
 - DueDate**
 - Date Hier...**
 - Year** (highlighted with a red box)
 - Quarter**
 - Ous Mes**
 - Day**
 - EmployeeKey**
 - OrderDate**
 - OrderQuan...**
 - ProductKey**
 - PromotionK...**
 - Region**
 - ResellerKey**
 - SalesAmount** (selected)
 - SalesOrderL...**
 - SalesOrder...**
 - SalesTerrito...**

Fields pane:

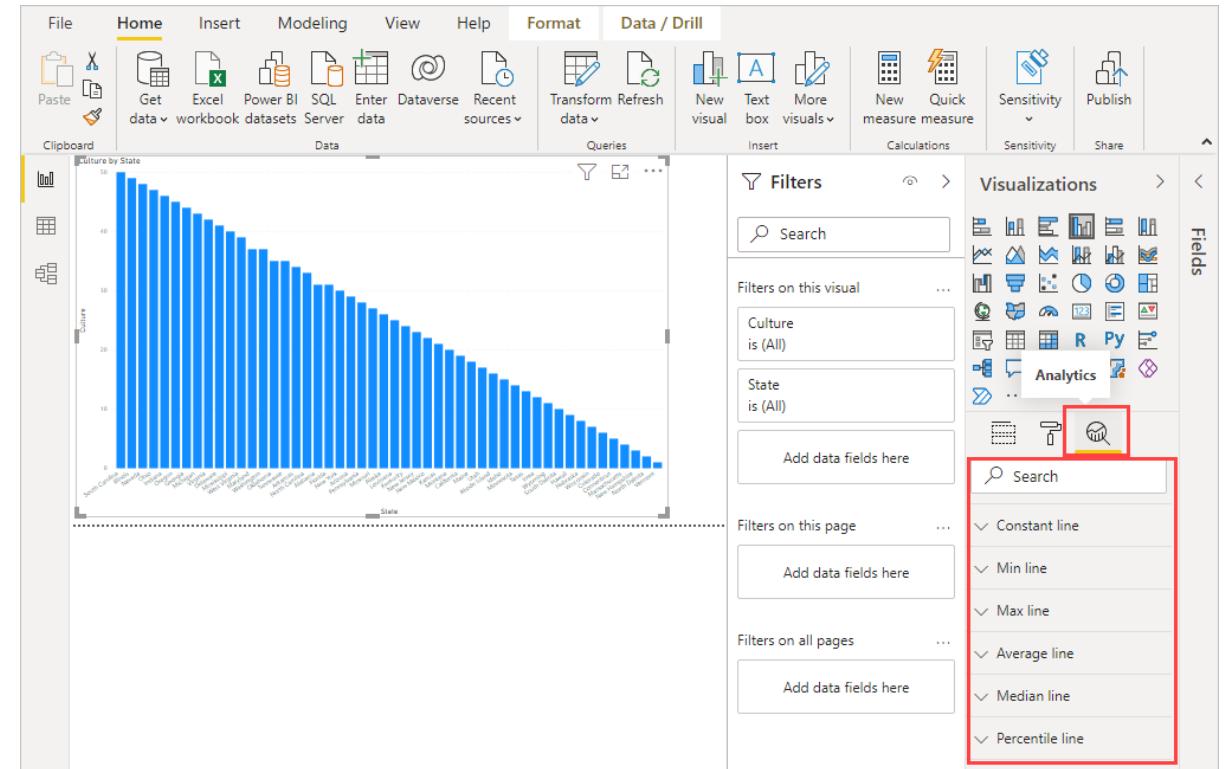
- Filtros:** Shows filters for 'Region' (es (Todo)) and 'SalesAmount' (is (All)).
- Agregar campos de datos aquí**
- Búsqueda**
- Filtros de esta página:** Shows a filter for 'DueDate - Year' (es (Todo)). A red arrow points from this section to the 'Year' field in the Fields pane.
- Eje Y:** Set to 'On'.
- Secondar...**: Desactivado O-
- Colores de datos**
- Etiquetas de datos**: Desactivado O-
- Formas**
- Área de trazado**
- Título**: Actuado

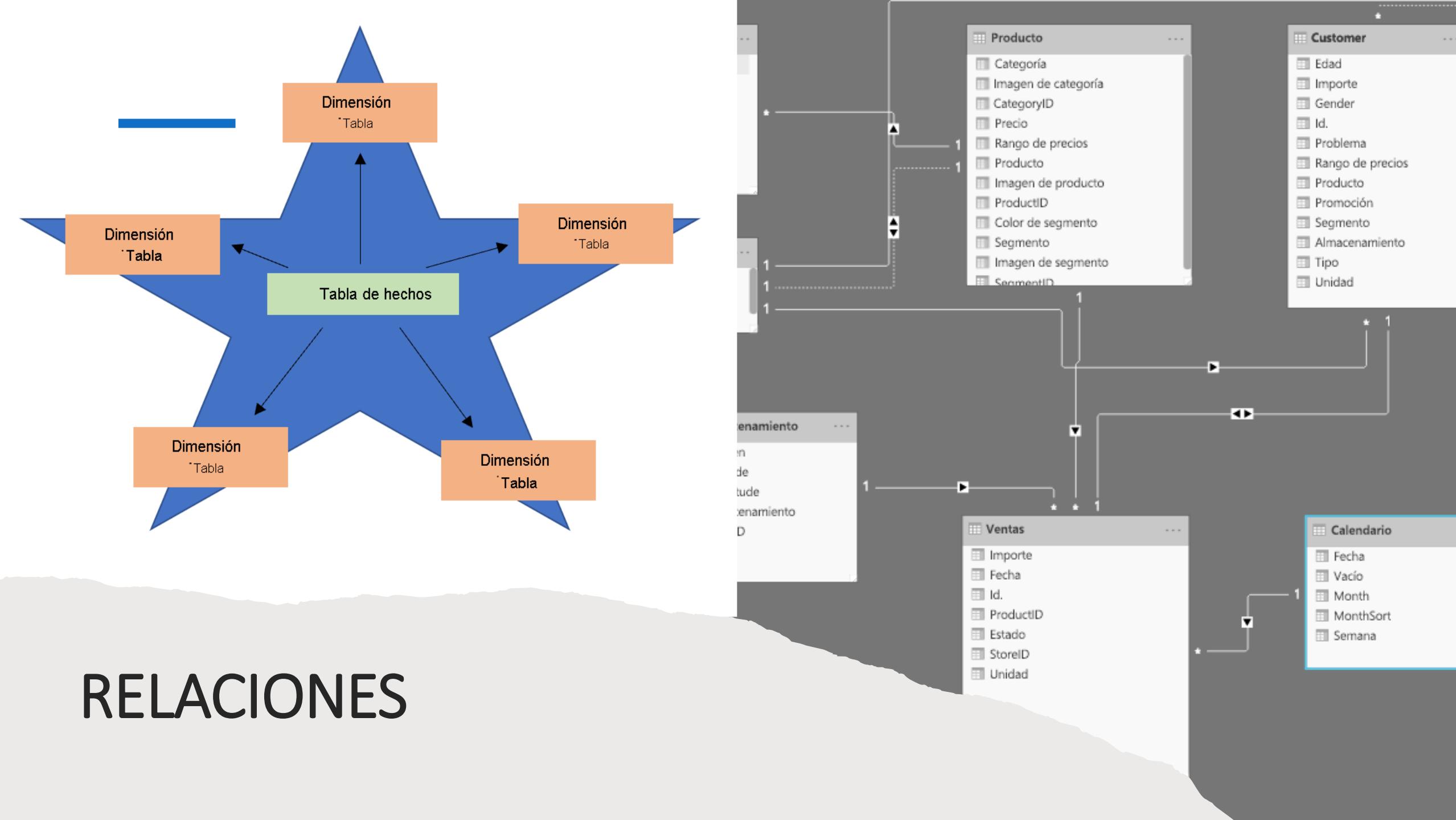


EJERCICIO

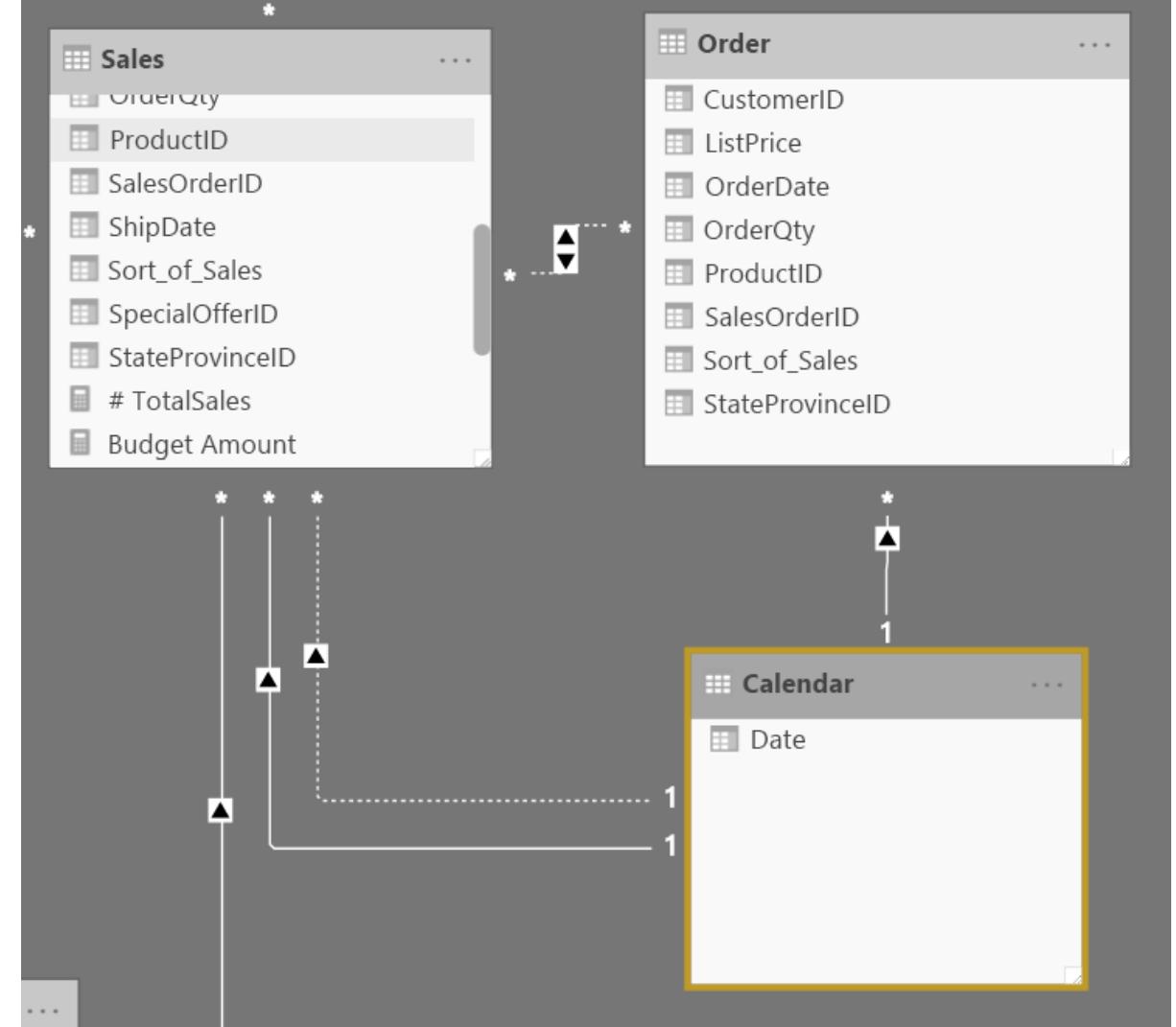
- Utilizar el siguiente enlace para obtener información https://en.wikipedia.org/wiki/List_of_busiest_airports_by_passenger_traffic acerca de los aeropuertos mas concurridos en el mundo.
- Generar un mapa de burbujas que nos ayude a identificar donde se encuentran los aeropuertos mas concurridos
- Limpiar los datos correctamente e identificar el tipo de columna para la ubicacion

ANALÍTICA

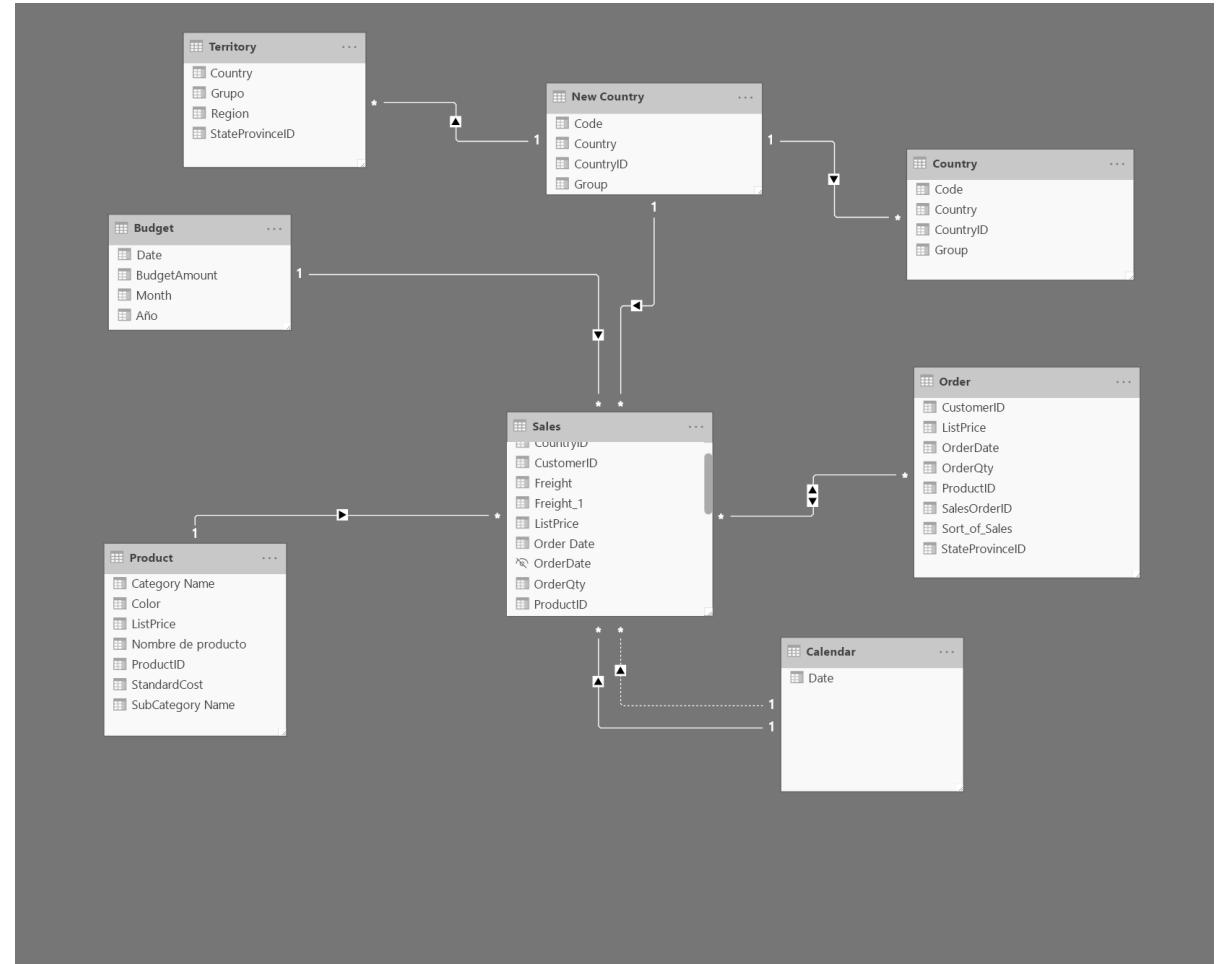




DIMENSIONES REALIZADORAS DE ROLES



CARDINALIDAD



DIRECCIÓN DE FILTRO CRUZADO

Con una dirección de filtro cruzado única:

- Solo se puede usar una tabla de una relación para filtrar los datos. Por ejemplo, la Tabla 1 se puede filtrar por la Tabla 2, pero la Tabla 2 no se puede filtrar por la Tabla 1.
- En el caso de una relación de uno a varios o de varios a uno, la dirección del filtro cruzado será desde el lado "uno", lo que significa que el filtrado se producirá en la tabla que tiene muchos valores.

Con **ambas direcciones de filtro cruzado** o el **filtrado cruzado bidireccional**:

- Una tabla de una relación se puede usar para filtrar la otra. Por ejemplo, se puede filtrar una tabla de dimensiones a través de la tabla de hechos y las tablas de hechos se pueden filtrar a través de la tabla de dimensiones.
- Es posible que el rendimiento sea menor al usar el filtrado cruzado bidireccional con relaciones de varios a varios.

Modelado de datos en Power BI

COLUMNAS CALCULADAS

The screenshot shows a data grid interface with a toolbar at the top featuring tabs for 'Estructura' (Structure), 'Formato' (Format), 'Propiedades' (Properties), and 'Ordenar' (Sort). A search bar labeled 'Columna =' is positioned above the grid. The grid displays six rows of data with four columns each. The columns are represented by icons: a document icon for the first column, a magnifying glass for the second, a chart for the third, and a dollar sign for the fourth. The data is as follows:

10248	11	12	\$14
10248	42	10	\$9.8
10248	72	5	\$34.8
10249	14	9	\$18.6
10249	51	40	\$42.4
10250	41	10	\$7.7

MEDIDA RAPIDA

The screenshot shows the Power BI interface with three main panes:

- Filtros (Filters):** Displays various filters applied to the page, such as Chain, City (Ciudad), District, Nombre, Open Month, and Store Type.
- Visualizaciones (Visualizations):** Shows a grid of visualization icons.
- Campos (Fields):** Lists fields like Ventas, District, Elemento, and Store. A context menu is open for the 'Average Sellin.' field, with the 'Nueva medida rápida' (Quick measure) option highlighted in pink.

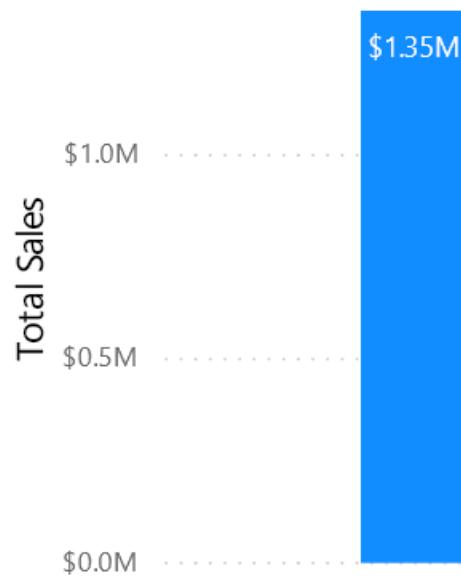
A pink box highlights the 'Nueva medida rápida' option in the context menu.



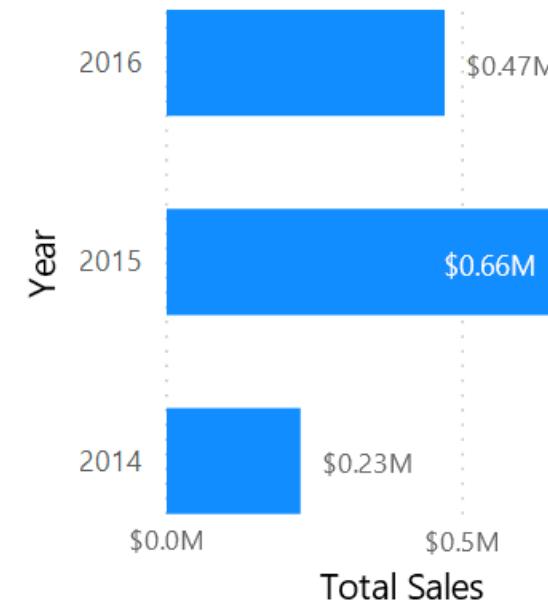
MEDIDA

CONTEXTO

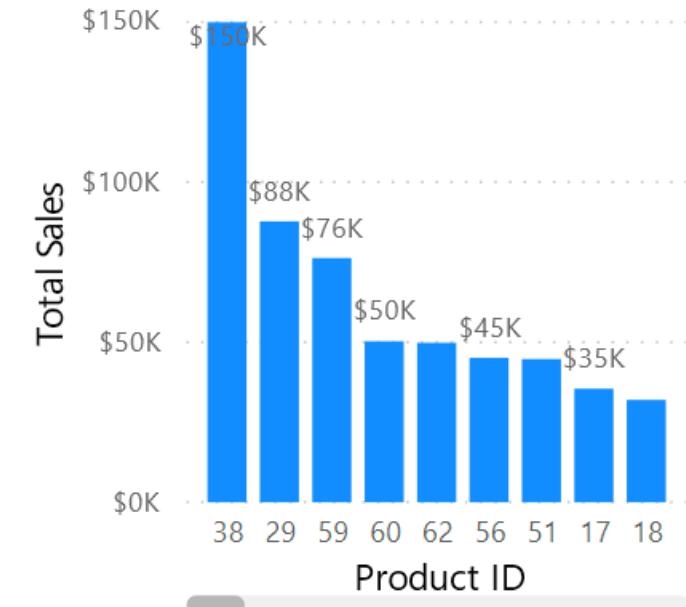
Total Sales



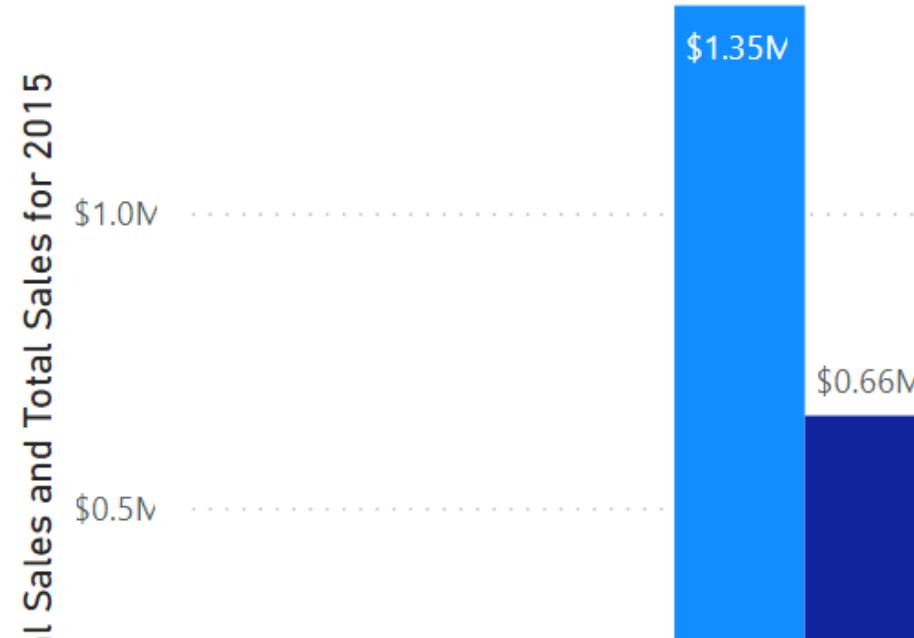
Total Sales by Year



Total Sales by Product ID



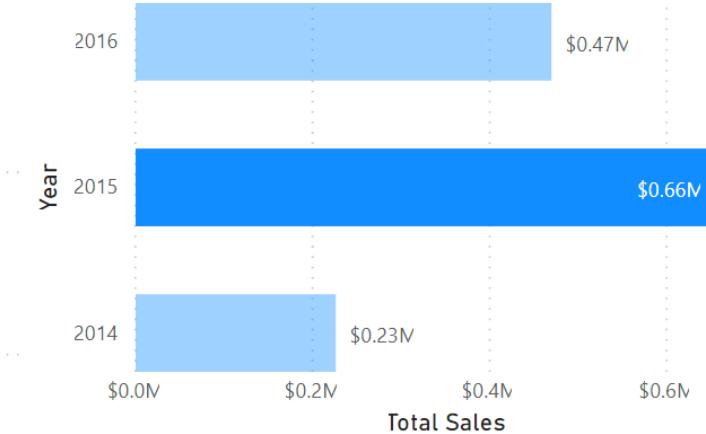
Total Sales Total Sales for 2015



and Total Sales for 2015

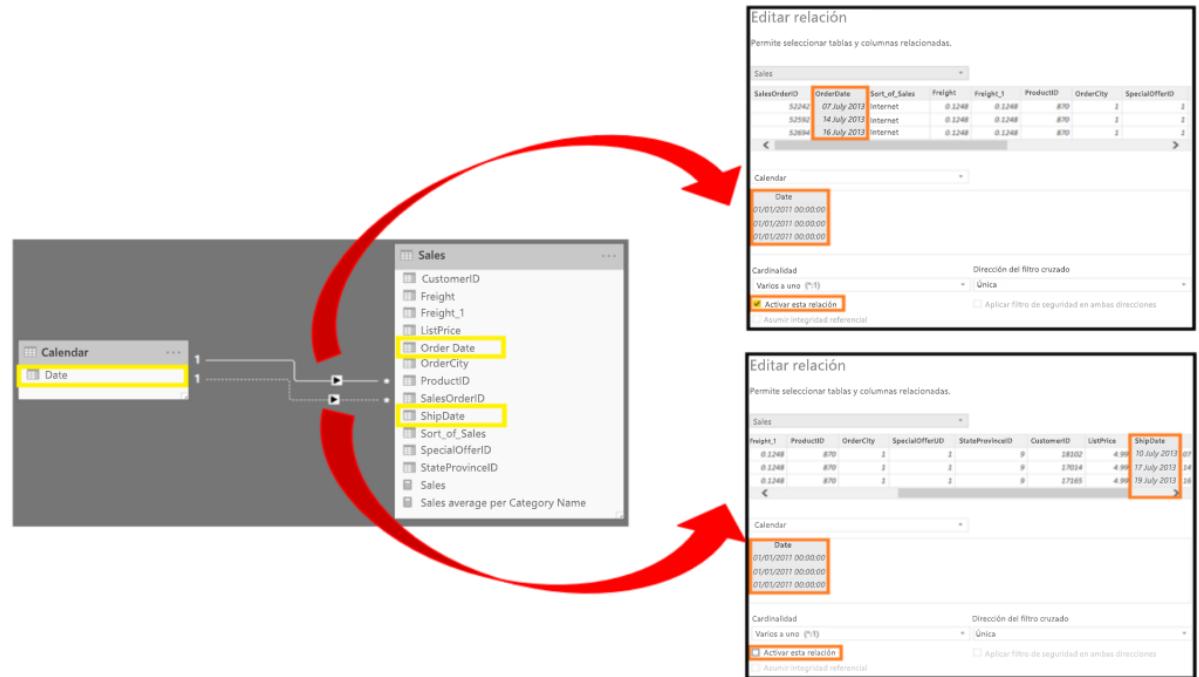
Total Sales for 2015

Total Sales by Year



CALCULATE

USERELATIONSHIP





Creación de cálculos DAX en Power BI

TIME INTELLIGENCE

Year	Month	Total Sales	Total Sales Previous Month
2015	March	\$39,979.9	\$41,207.2
2015	April	\$55,699.39	\$39,979.9
2015	May	\$56,823.7	\$55,699.39
2015	June	\$39,088	\$56,823.7
2015	July	\$55,464.93	\$39,088
2015	August	\$49,981.69	\$55,464.93
2015	September	\$59,733.02	\$49,981.69
2015	October	\$70,328.5	\$59,733.02
2015	November	\$45,913.36	\$70,328.5
2015	December	\$77,476.26	\$45,913.36

Creación de cálculos DAX en Power BI II

$$\frac{\partial^2 u}{\partial t^2} = c^2 \frac{\partial^2 u}{\partial x^2}$$

$$\frac{df}{dt} = \lim_{h \rightarrow 0} \frac{f(t+h) - f(t)}{h}$$

MARCADORES

TAILWIND TRADERS

Main Dashboard

Variance Chart

Categoría de producto:

Top 10 Products:

Top 10 Customer:

Gross Sales by Year to Date:

Net Sales by Country:

Net Sales: \$184.46M
Gross Sales: \$170.96M
Cost of Sales: \$13.56M
Gross Profit: \$49.01K
Gross Profit YTD: \$16.49M
Sales by Year: 2014, 2013, 2012, 2011, 2010
Sales by Month: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
Sales by Quarter: Q1, Q2, Q3, Q4
Sales by Year: 2014, 2013, 2012, 2011, 2010
Sales by Month: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
Sales by Quarter: Q1, Q2, Q3, Q4"/>

Selección

Crear subcapas Crear subsección Agregar Dorver

Films **Paralíptico** **Hasta el cielo**

Variance chart

Impresión general

Paralíptico

Sig. para U. C. P. d. d. d. d. d.

Supervisar en línea

Slicer

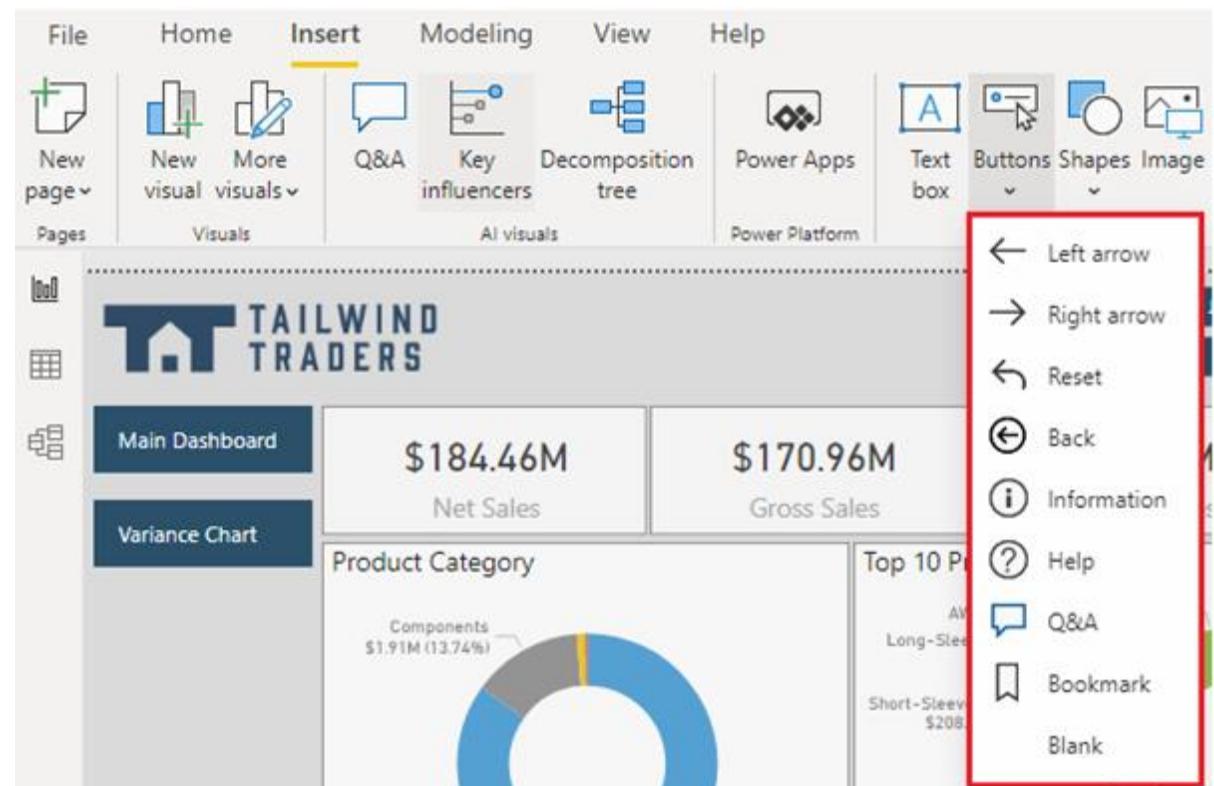
Orden de ventas

Categoría de producto

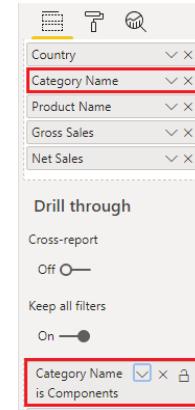
Principales 10 clientes

Venta neta por país

BOTONES



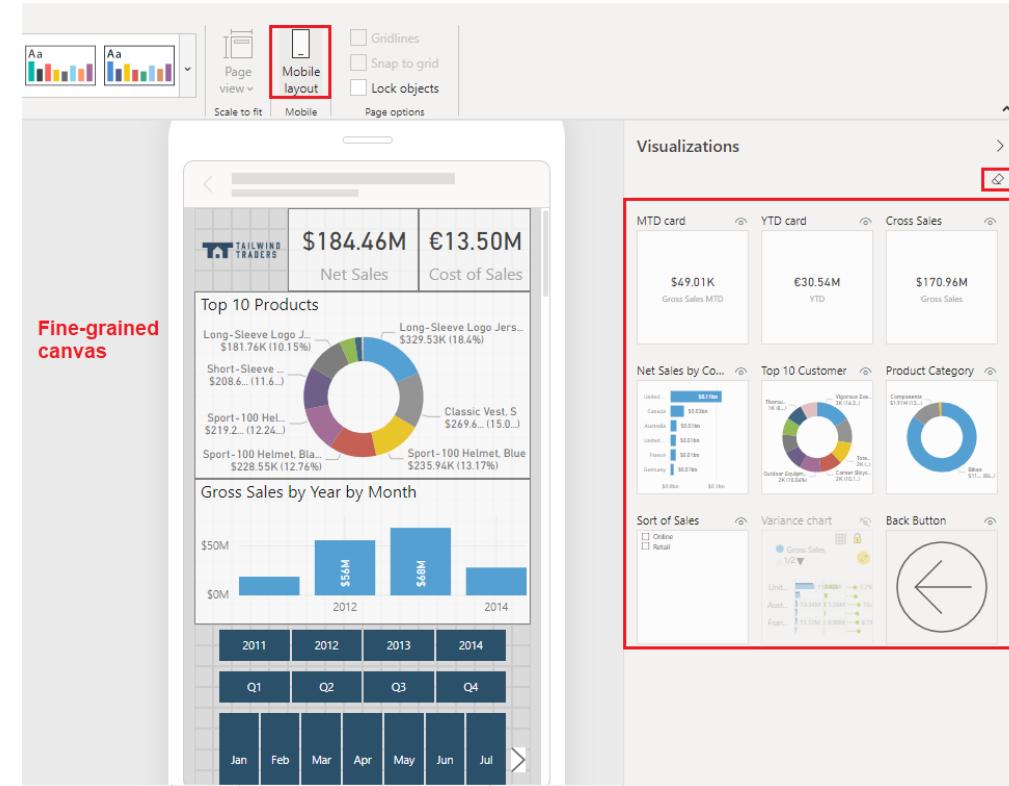
OBTENCIÓN DE DETALLES



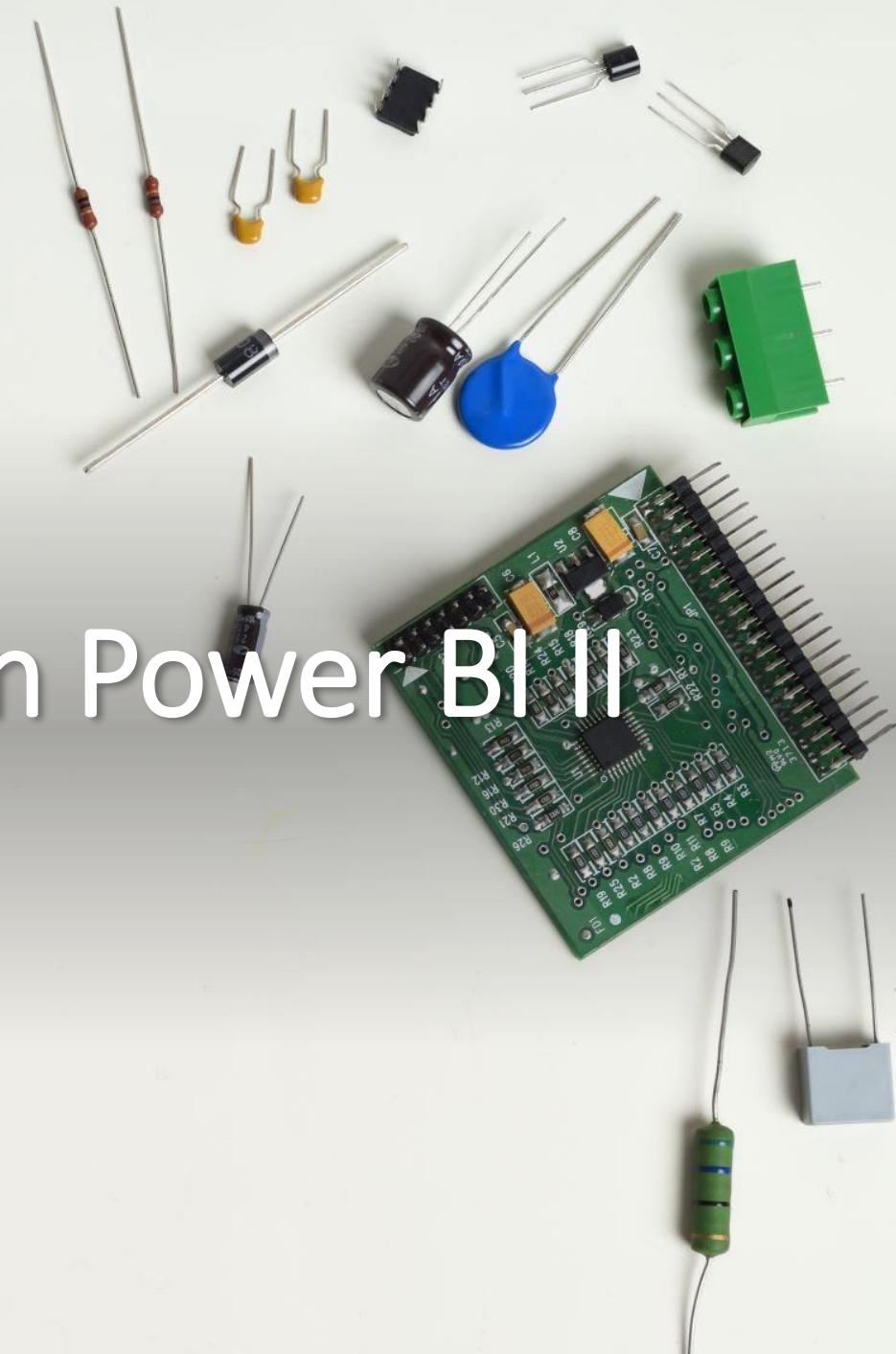
PUBLICACIÓN



MÓVILES



Diseño de un informe en Power BI II



PANELES



ANCLAR ICONO

Orders over Time

Count of Sales...

0 200

0 20

Anclar al panel

Seleccione un panel existente o cree uno nuevo.

¿Dónde le gustaría anclarlo?

Panel existente

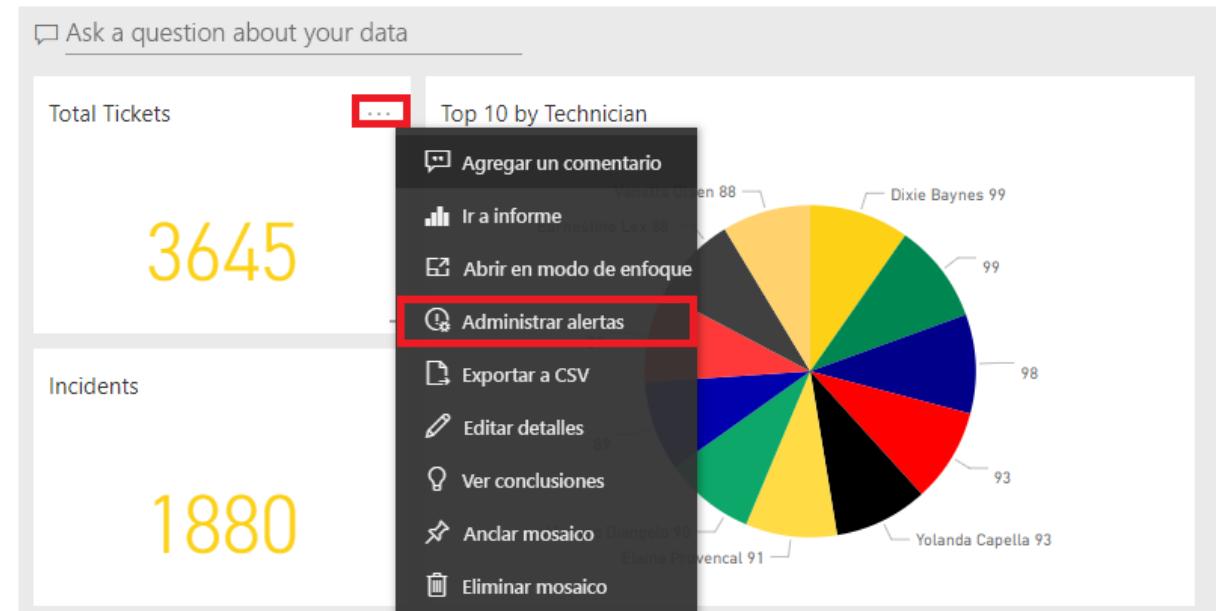
Nuevo panel

Seleccionar el panel existente

Categoría

Anclar Cancelar

ALERTAS



Q&A

[⟨ Salir de Preguntas y respuestas](#)

 Nueva experiencia de Preguntas y respuestas activada

 Ask a question about your data

Pruebe una de estas opciones para comenzar

what is the sales by order
date by product category
name

show me sales average
per category name for the
last year

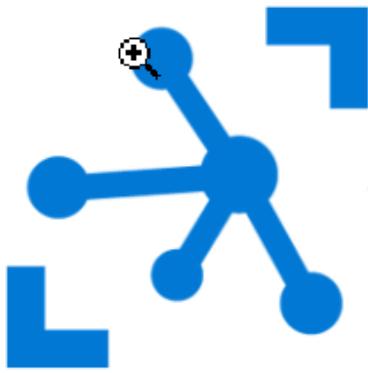
show me sales average
per category name for the
last week

top colors by sale sales
amount

what is the sales by ship
date by color

top product category
names by march sales

[Mostrar todas las sugerencias](#)



IoT Hub



Azure Stream Analytics



Power BI

REAL TIME



Creación de un panel de Power BI



Aplicación de seguridad de nivel de
fila