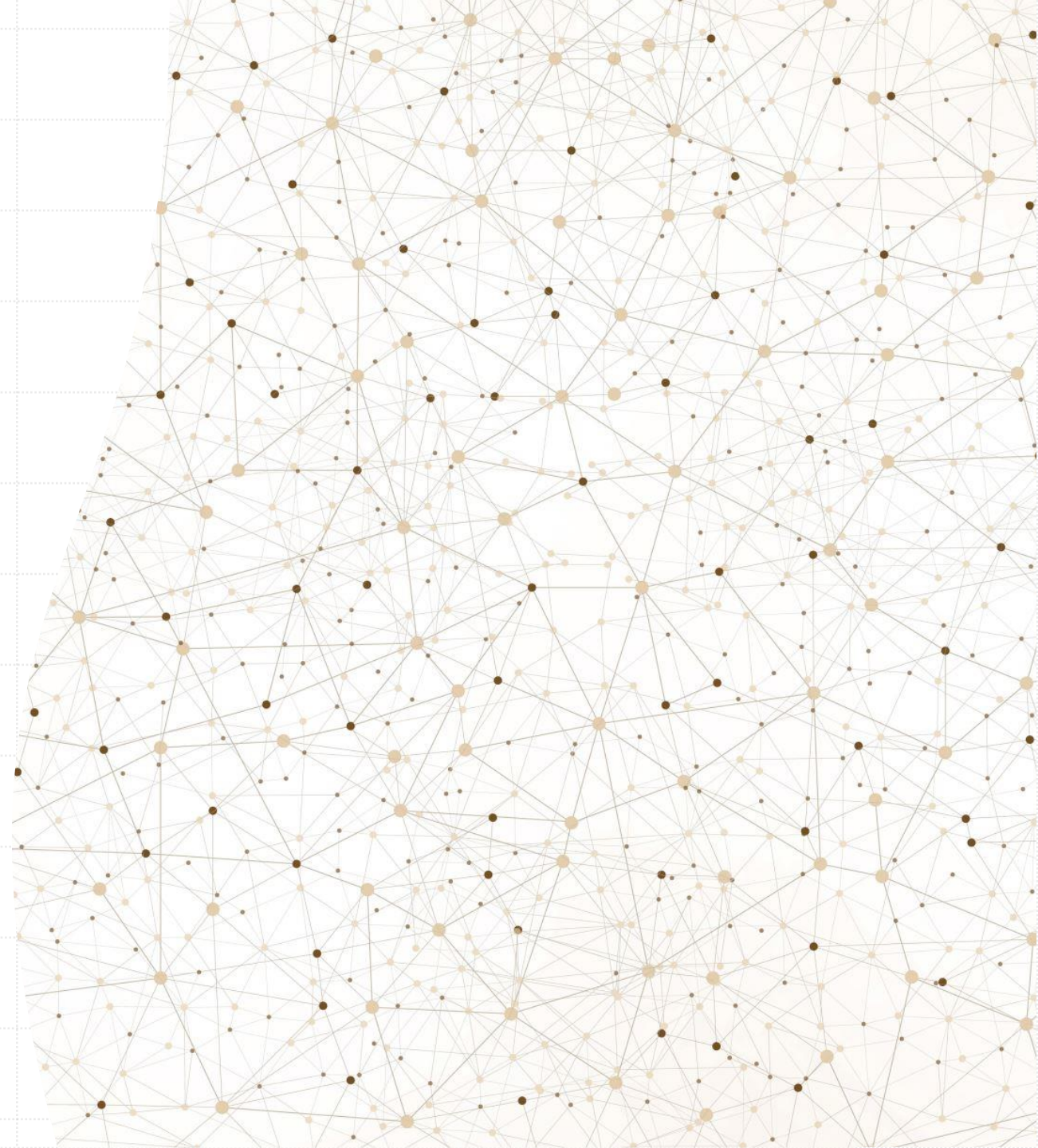


# POWER BI AVANZADO







PRESENTACIONES

OVERVIEW

Sales Report

\$5.3M

Australia

\$5.3M

Canada

\$2.6M

France

\$2.3M

Germany

\$3.3M

UK

\$21.8M

USA

Key influencers

Top segments



What influences NPS to be

7



When ...

...the likelihood of NSAT being 7 increases by

UnitPrice is 298.5 - 299.94

10.20x

UnitPrice is 197.45 - 199.45

10.20x

Manufacturer is Litware, INC.

10.20x

Color is Brown

10.20x

StockType is High

10.20x

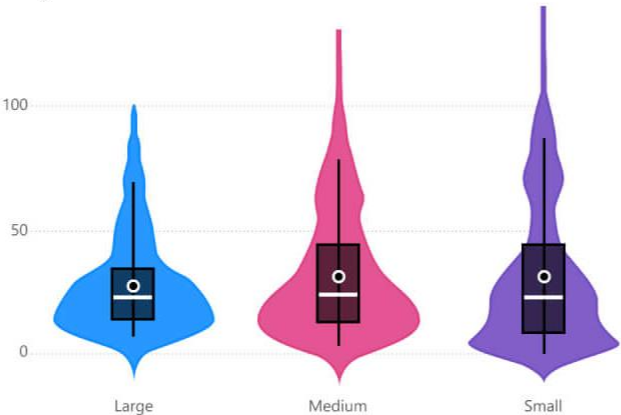
Manufacturer is Contoso, Ltd

10.20x

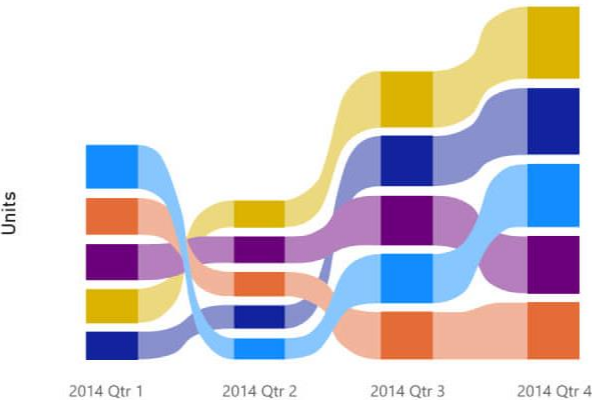
Color is Silver

10.20x

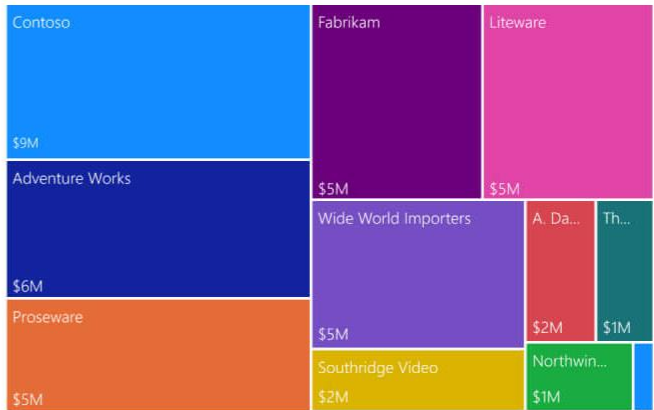
Units by Product and Sale Size



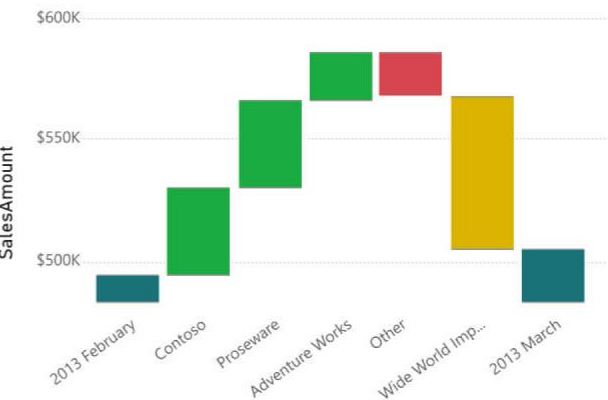
Sales Amount by Year, Month and Brand Name



Sales Amount by Brand Name



Sales Amount by Year, Month and Brand Name



Visualization



Values

Drag data fields here

Drillthrough

Keep all filters

Off

Drag data fields here





Synapse Data  
Warehousing



Synapse Data  
Engineering



Data  
Factory



Synapse Data  
Science



Synapse Real  
Time Analytics



Power BI

T-SQL

Spark

Serverless  
compute

KQL

Analysis  
Services

OneSecurity

Warehouse

Lakehouse

Delta –  
Parquet  
Format

Delta –  
Parquet  
Format



OneLake

Kusto DB

Dataset

Delta –  
Parquet  
Format

Delta –  
Parquet  
Format

When a new email arrives (V3)

{x} Initialize flow priority variable

Condition

Importa... x is equal to high

+ Add

✓ If yes

{x} Set flow priority as high

Add an action

✗ If no

{x} Set flow priority as normal

Add an action

Run a flow built with Power Automate for desktop

\* Desktop flow

Retrieve shipping information

Edit

\* Run Mode

Attended (runs when you're signed in)



BASES DE DATOS



kaggle

# PREPARACIÓN DE DATOS





# TRANSFORMER DATOS

The background is a complex, abstract network visualization. The top half is a light gray area with a white grid and faint, thin lines connecting various nodes. The bottom half is a dark purple area with a dark grid and more prominent, glowing red lines connecting nodes. Some nodes are represented by small, semi-transparent cubes in various colors (gray, white, blue, pink). The overall effect is a sense of a vast, interconnected digital space.

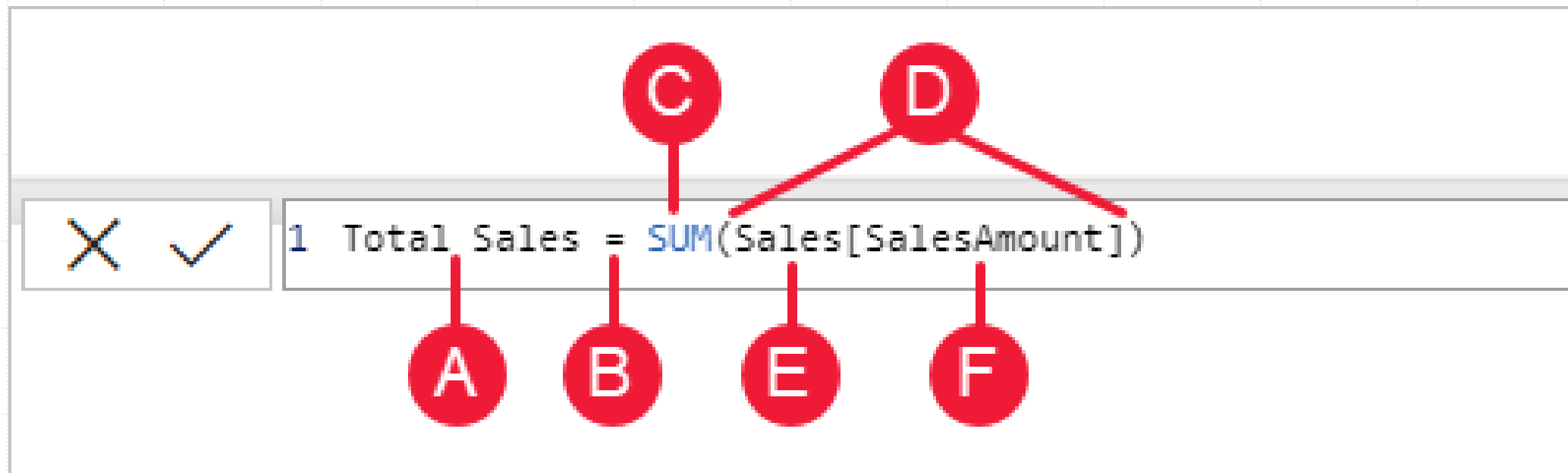


# EJERCICIO

- Utilizando los csv Carpetas Investigación\_FGJCDMX y CAT\_Delitos.
- Eliminar columnas innecesarias (tempo)
- Combinar consultas para obtener la categoría de delito ID\_CatDelito > Tabla CatDelito
- Separar los datos de long/lat en 2 columnas
- Columna condicional para identificar aquellos delitos que son robos



# DAX

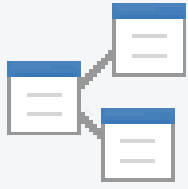


File

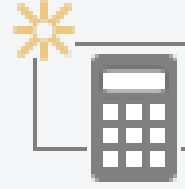
Home

Modeling

Help

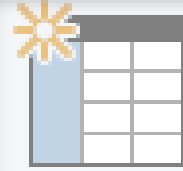


Manage  
Relationships  
Relationships

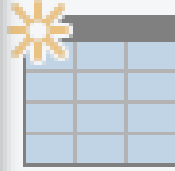


New  
Measure

Calculations



New  
Column

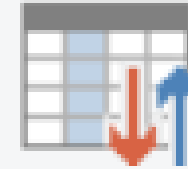


New  
Table



New  
Parameter

What If



Sort by  
Column

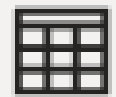
Sort

Data type: Text

Format: Text

\$ % , .00

Formatting



```
1 Price Range =  
2 SWITCH (  
3     TRUE,  
4     Sales[Net Price] < 100, "LOW",  
5     Sales[Net Price] < 1000, "MEDIUM",  
6     "HIGH"  
7 )
```



January	560 000.26	434 308.30
February	498 062.65	408 247.91
March	683 267.08	559 707.39
April	493 207.12	442 254.04
May	723 333.51	596 459.86
June	691 123.12	554 478.35
July	681 300.11	565 479.84
August	682 680.51	539 130.50
September	1 019 687.62	862 018.15
October	1 070 704.67	877 438.19
November	1 461 756.25	1 282 805.78

**Month = March  
AND  
Country = UK**

2006	August	\$506,191.69	\$979,579.85
	September	\$473,943.03	\$1,453,522.89
	October	\$513,329.47	\$1,966,852.36
	November	\$543,993.41	\$2,510,845.77
	December	\$755,527.89	\$3,266,373.66
	<b>Total</b>	<b>\$3,266,373.66</b>	<b>\$3,266,373.66</b>
	January	\$596,746.56	\$596,746.56
	February	\$550,816.69	\$1,147,563.25
	March	\$644,135.20	\$1,791,698.45
	April	\$663,692.29	\$2,455,390.74

Total Sales YoY Growth % =

```
VAR TotalSales = SUM('Internet Sales'[Sales Amount])
VAR TotalSalesPP =
    CALCULATE(
        SUM('Internet Sales'[Sales Amount]),
        PARALLELPERIOD('Date'[Date], -12, MONTH)
    )
VAR TotalSalesVariance = TotalSales - TotalSalesPP
VAR Result = DIVIDE(TotalSalesVariance, TotalSalesPP)
RETURN
Result
```



# EJERCICIO

- Utilizando los csv Carpetas Investigación\_FGJCDMX y CAT\_Delitos.
- Generar una columna calculada para identificar el tiempo que se demora en abrir una investigación
- Calcula cual es el tiempo promedio de inicio de una investigación para el DelitoporRobo
- Generar una medida que indique si el tiempo ha incrementado o decrementado
- Calcular el promedio móvil de 3 meses para la cantidad de delitos por robo





```
1 Total Sales All Countries =  
2 CALCULATE(  
3     [Total Sales],  
4     ALL('Sales Territory'[Sales Territory Country])  
5 )
```

Australia

Canada

France

Germany

NA

United  
KingdomUnited  
States

Country	Total Sales	Total Sales All Countries	% of Total
Australia	\$9,061,000.58	\$29,358,677.22	30.86%
Canada	\$1,977,844.86	\$29,358,677.22	6.74%
France	\$2,644,017.71	\$29,358,677.22	9.01%
<b>Total</b>	<b>\$13,682,863.16</b>	<b>\$29,358,677.22</b>	<b>46.61%</b>

Untitled - Power BI Desktop

Clipboard External data Resources Insert Custom visuals Relationships Calculations Share

Table with unique columns = `Distinct('Table'[Column1])`

Column1
a
b
c



# EJERCICIO

- Utiliza las tablas Ej\_SalesTeam, Ej\_Invoices, Ej\_OrderLeads
- Calcula el total de ventas para cada miembro del equipo de ventas, este dato lo obtendremos de facturación
- Que porcentaje aporta cada miembro de la compañía(all selected)
- Cual es el % de participación de acuerdo a cada tipo de plato (all except)
- Generar un catalogo con los miembros de ventas (distinct)



PROVEEDOR	% DE ASIGNACIONES
SIN PROVEEDOR	31,60%
CLARO	23,35%
NOKIA	13,68%
SERVYCOM	3,07%
TCTECH	2,59%
CERAGON	2,36%
LINKTELCO	2,36%
CHAVEZCOM SRL	2,12%
GLOBALING	2,12%
GLOCOM	2,12%
CELLTREX	1,89%
IGGAMTEL	1,89%
INTEGRAR SRL	1,89%
TELKOR	1,65%
TERABYTE SRL	1,65%
COTELSA	1,42%
NOWCOM	1,42%
VECTUS	1,42%
PEREZ ELIO ULISES	1,18%
ACID	0,24%
<b>Total</b>	<b>100,00%</b>

## Color de fondo - % DE ASIGNACIONES

Dar formato por

Reglas

Aplicar a

Solo valores

Según el campo

Color\_condicional

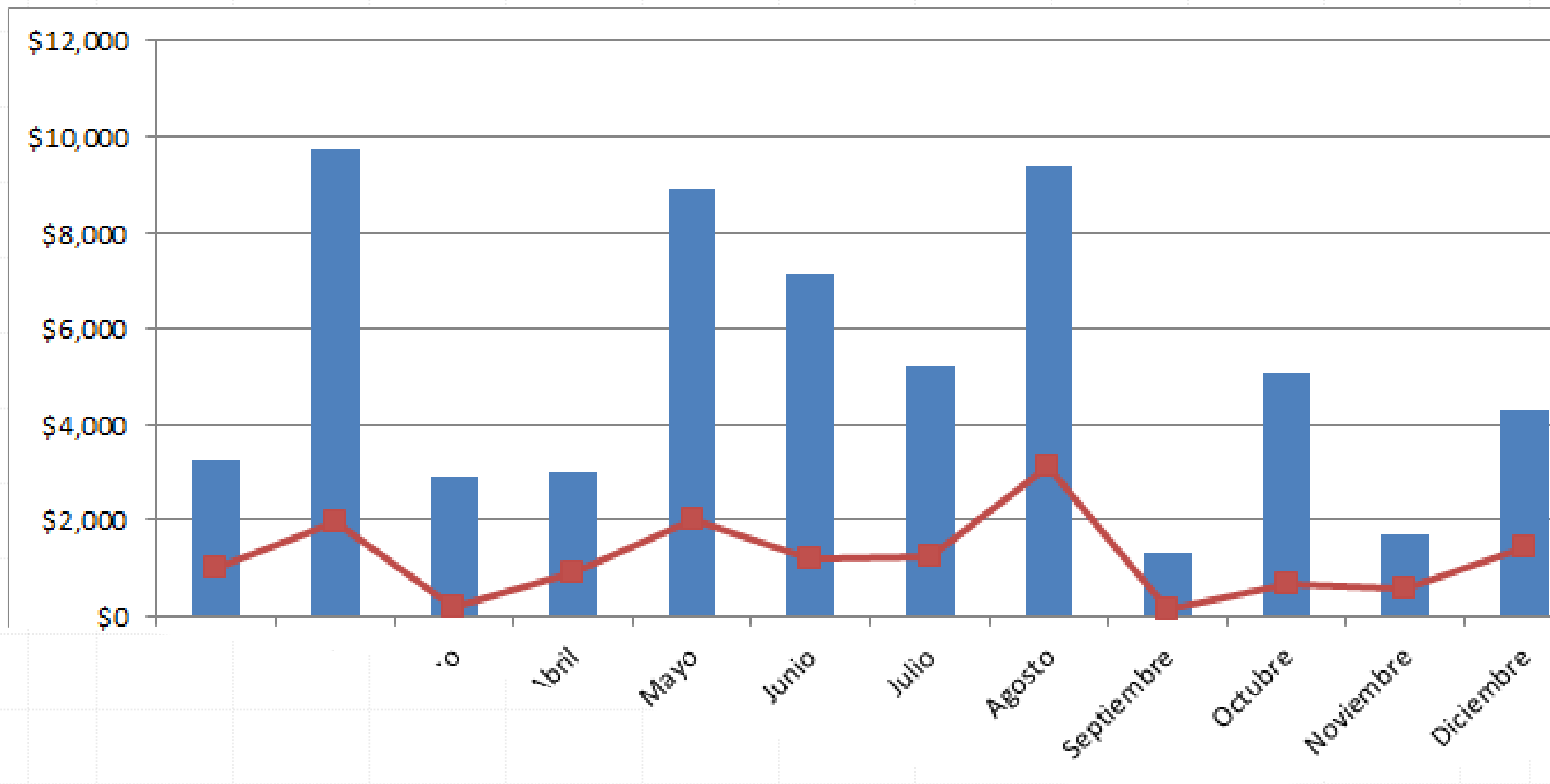
**Medida creada**

Reglas

↕ Inversión del orden d...

+ Nu

Si el valor	es	1	Número	entonces	
Si el valor	es	2	Número	entonces	
Si el valor	es	3	Número	entonces	







# Root Cause Analysis

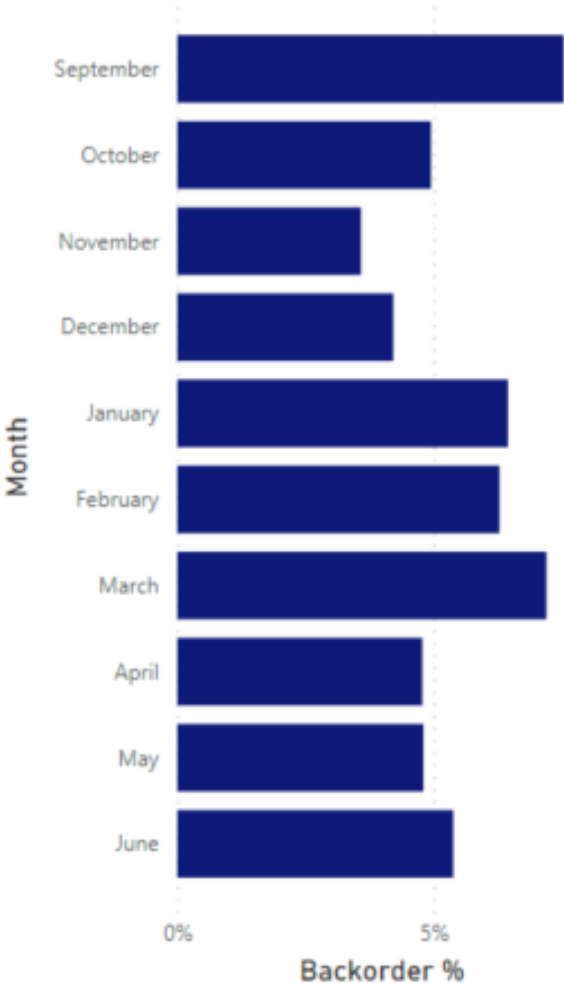
Forecast Bias ×  
Accurate (5% to -5%)

Demand Type ×  
Intermittent

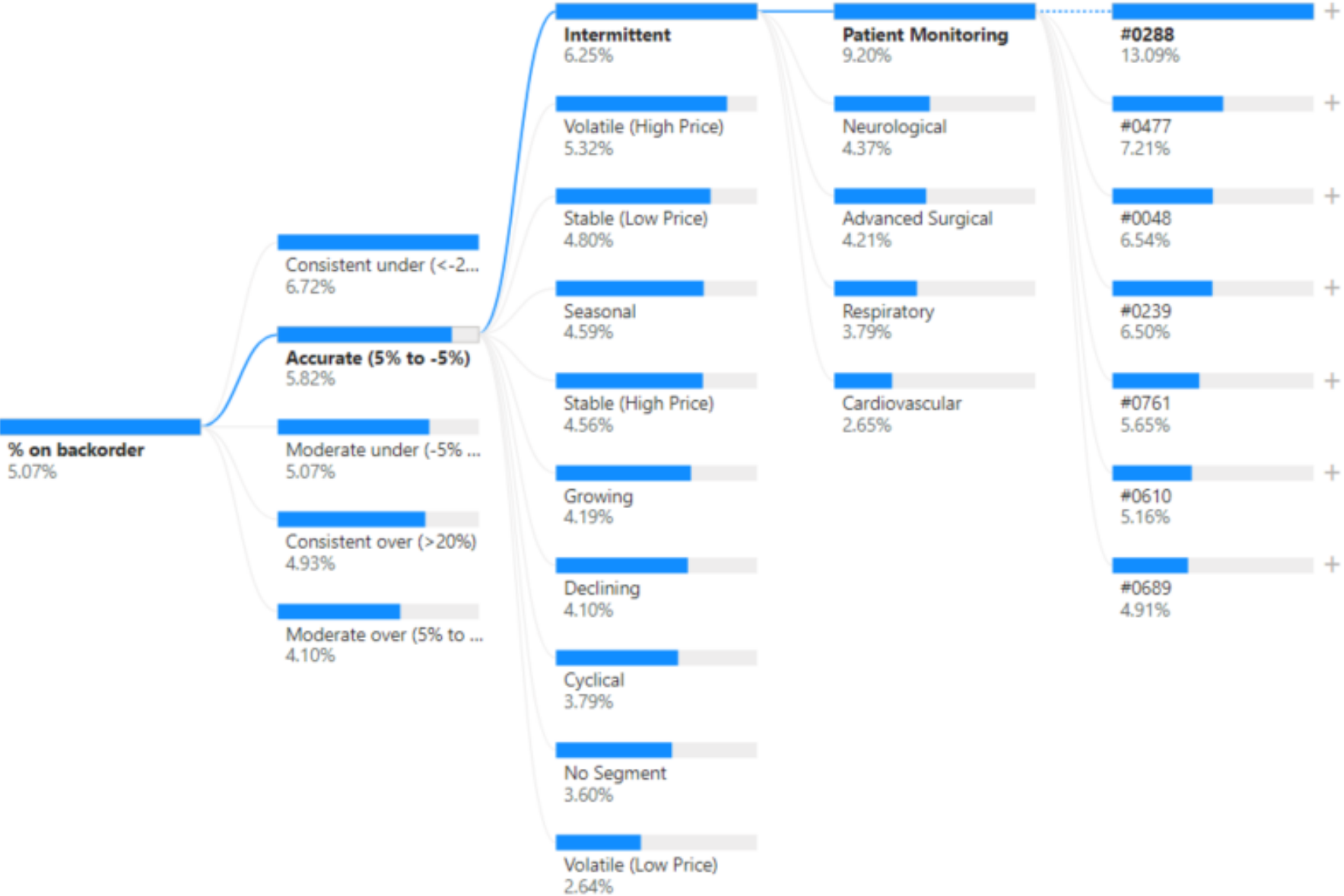
Product Type ×  
Patient Monitoring

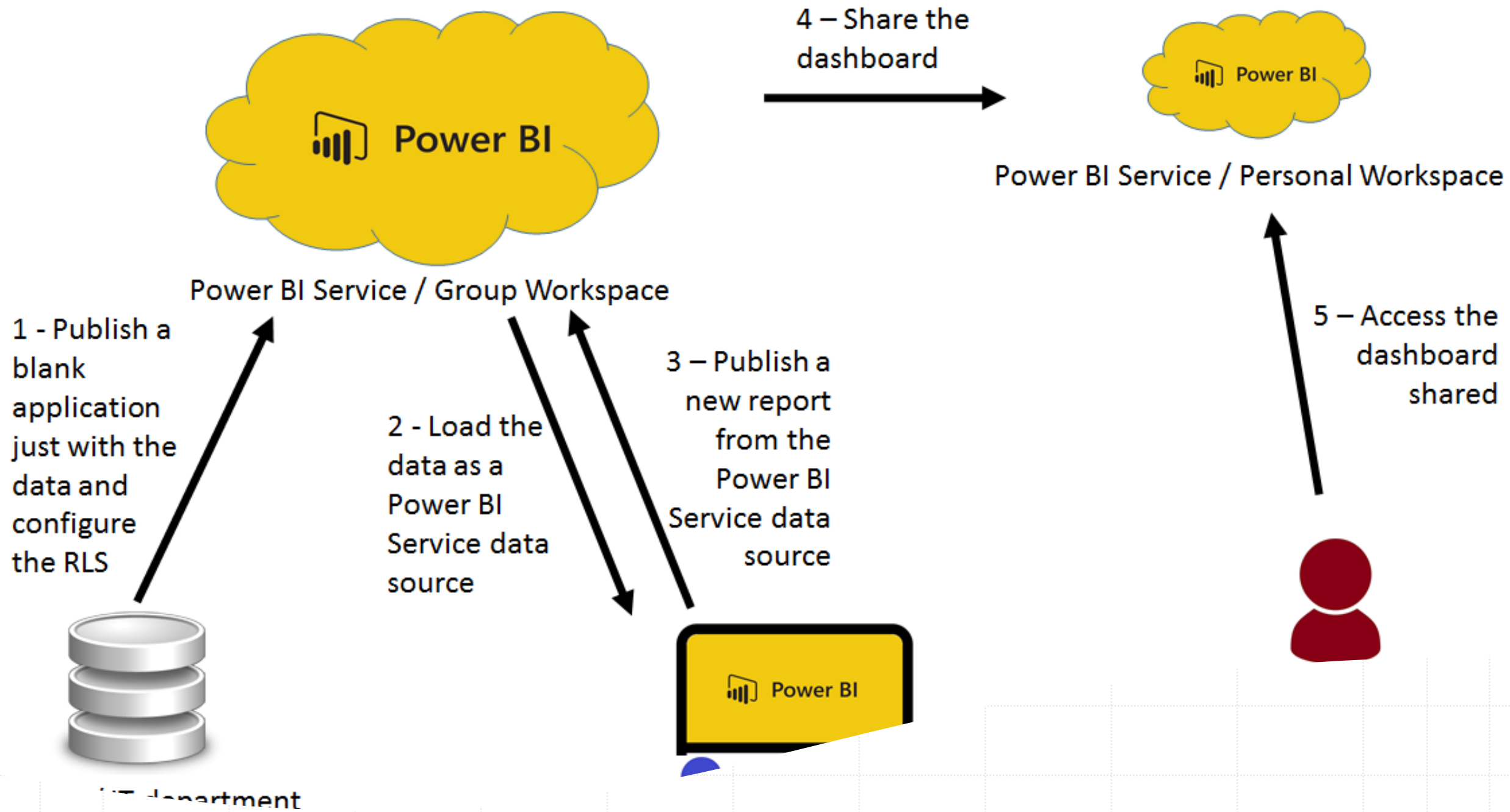
Plant ×

Average of Backorder % by Month



High Risk Low Risk





When...

3

...the likelihood of Rating being Low increases by

Role in Org is consumer

2.57x

Theme is usability

2.55x

Theme is security

2.09x

Subscription Type is Premier

1.83x

Company Size is < 5,000

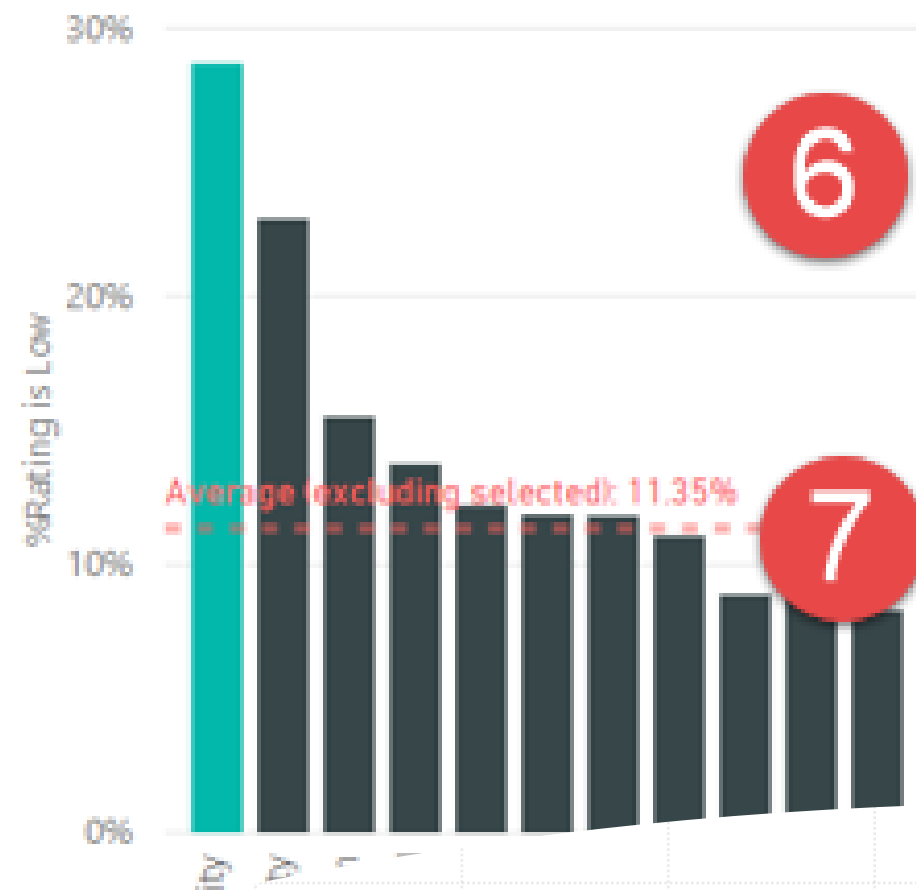
1.48x

Country-Region is France

1.44x

4

Rating is more likely to be Low when Theme is usability than otherwise (on average).



Data Source  
On-Premises



Oracle



SQL Server



Power BI Personal Gateway



Power BI Personal Gateway

Scheduled Data  
Refresh



Data Visualization



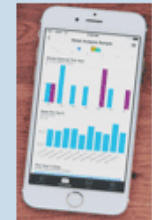
Desktop



Tablet

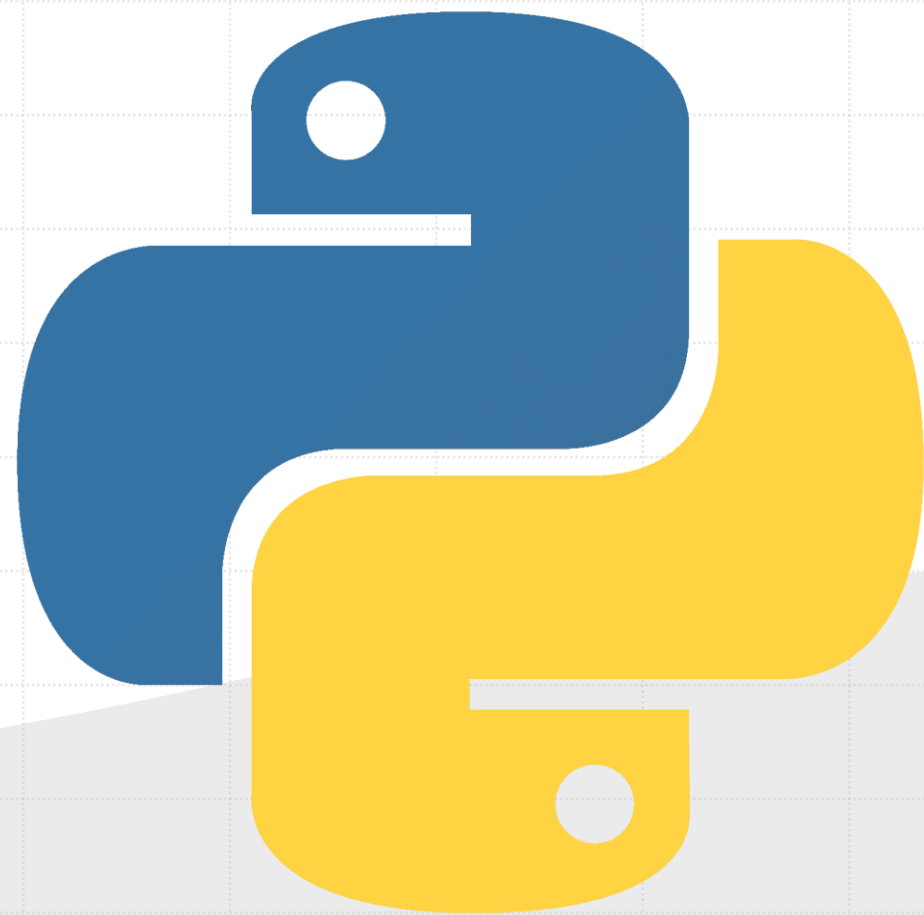


Mobile

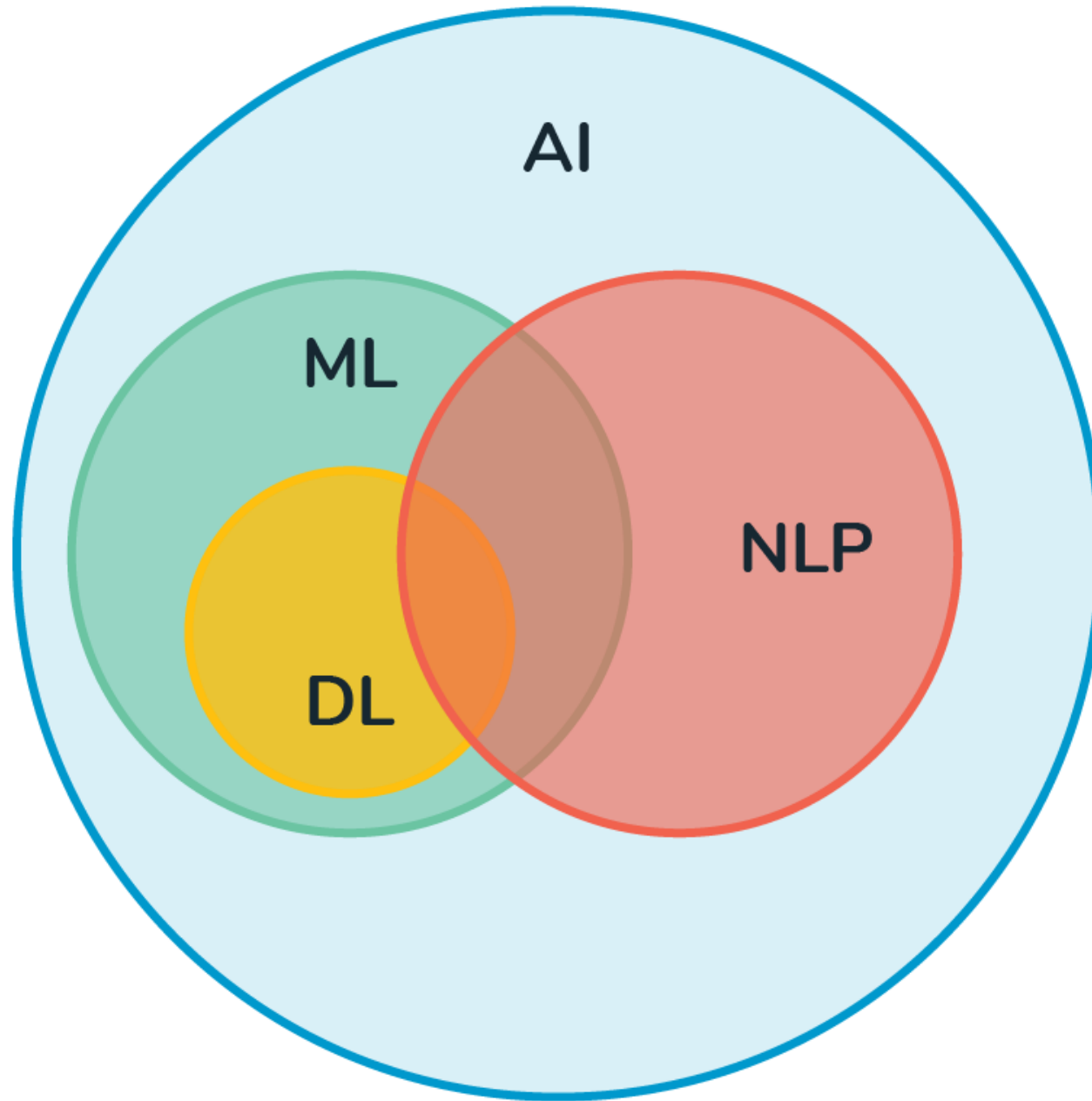






Apple





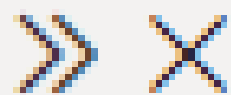
python<sup>TM</sup>



-  Artificial intelligence
-  Machine learning
-  Language Processing
-  Deep learning



## Sync slicers



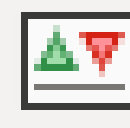
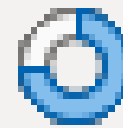
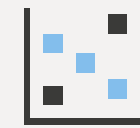
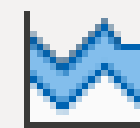
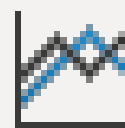
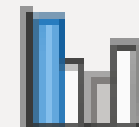
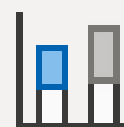
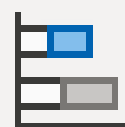
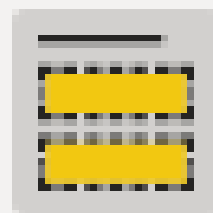
Filters

Select a slicer in one of your report pages to start syncing it across other pages

## Visualizations



Build visual



# Power Automate





## Base de datos SQL Server

Servidor ⓘ

SQLServer01

Base de datos (opcional)

AdventureWorksDW

Modo Conectividad de datos ⓘ

☒ Importación

☐ DirectQuery

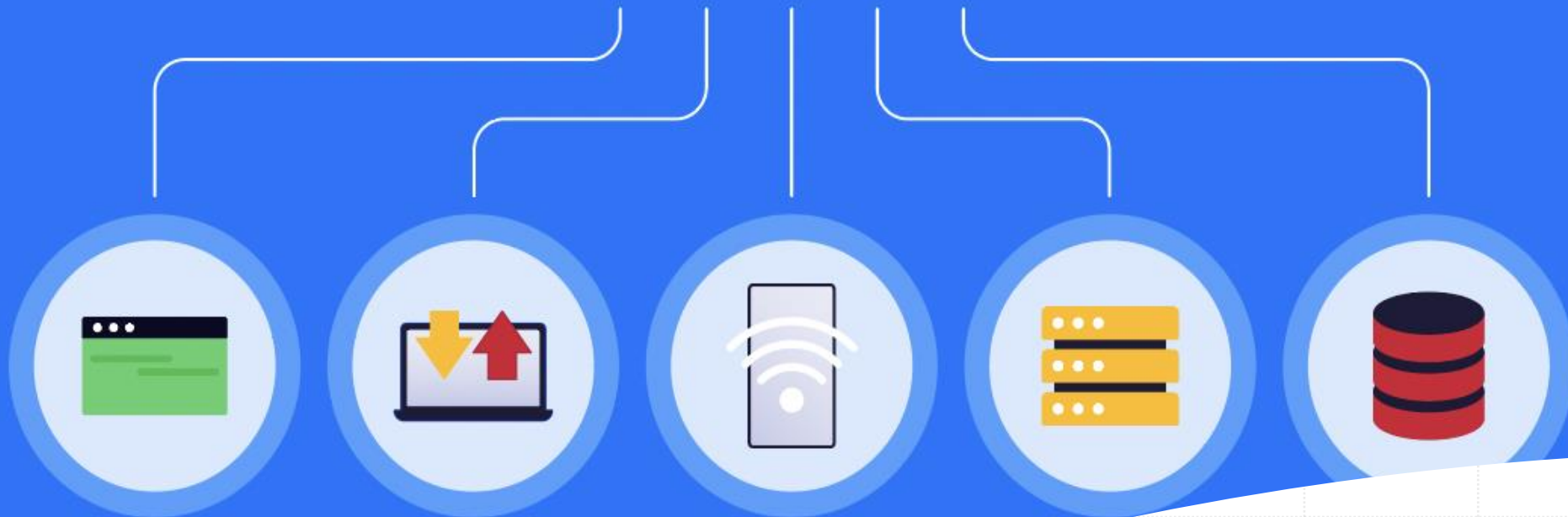
Opciones avanzadas

Aceptar

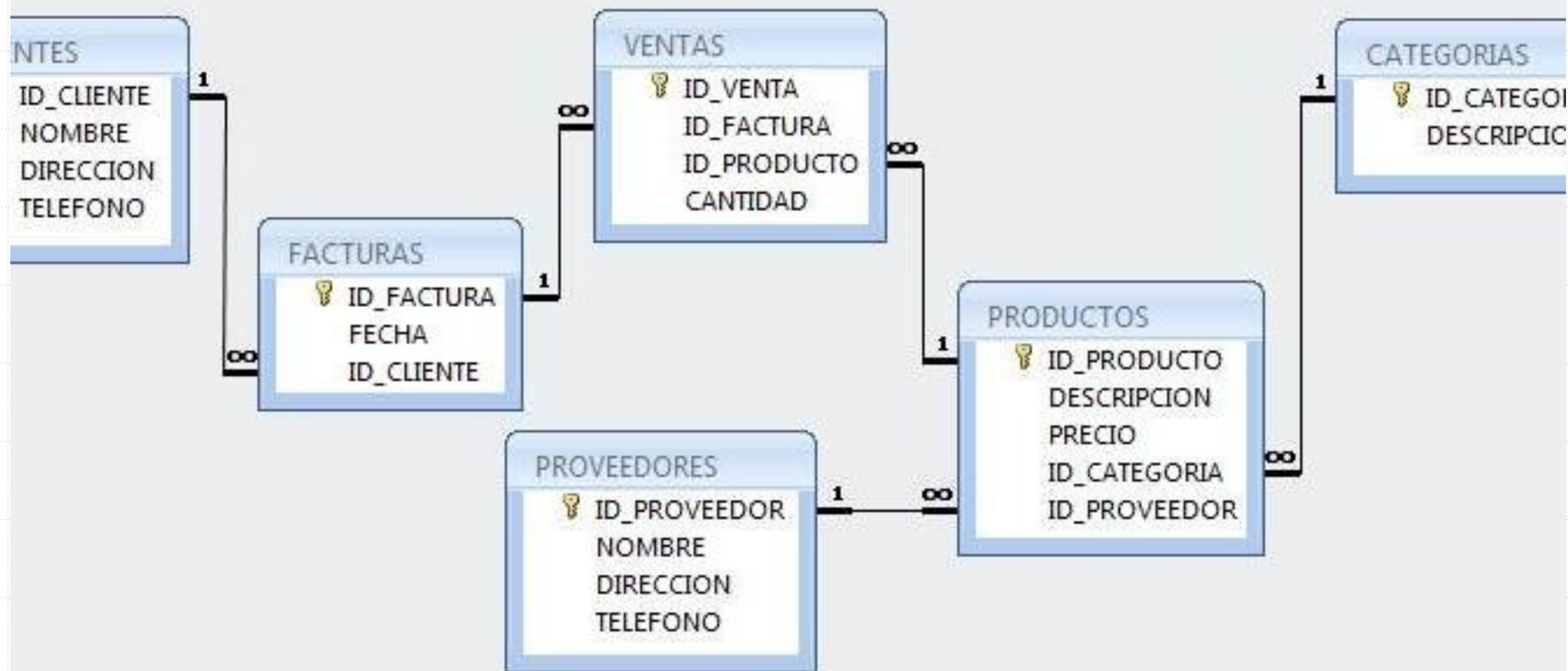
Cancelar

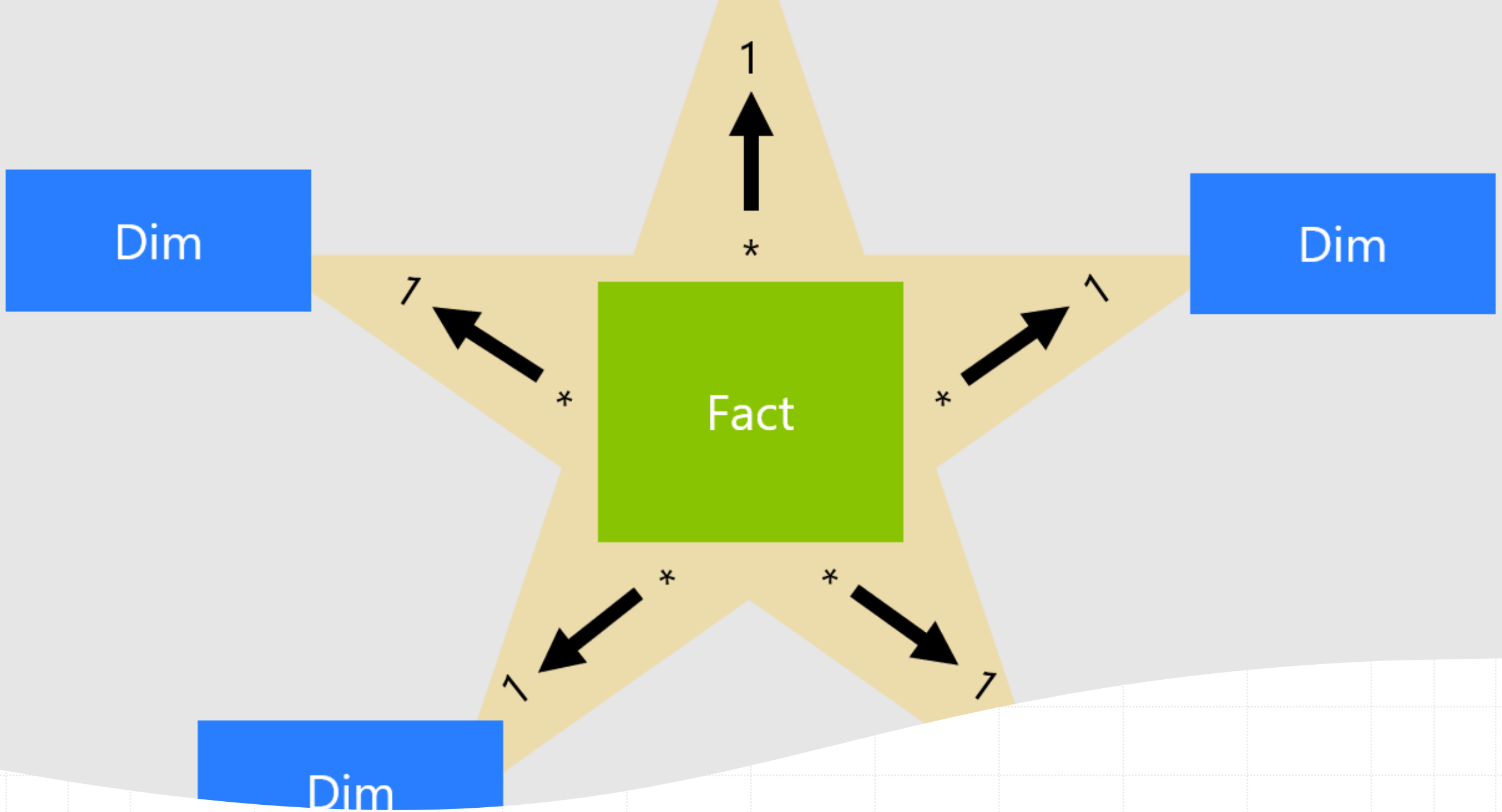


# API



## ESQUEMA DE UNA BASE DE DATOS RELACIONAL





# Base de datos SQL Server

Servidor ⓘ

Base de datos (opcional)

Modo Conectividad de datos ⓘ

- ☒ Importar
- ☐ DirectQuery

▸ Opciones avanzadas