



αzetta
the analytics experts



Data Visualization:

Lo que tenés que saber

Gastón Laterza
Data Visualization Engineer @OLX

Speaker



Gastón Laterza

Data Visualization Engineer @OLX

Gastón trabaja integrado con los equipos de Product, aprovechando los datos con técnicas de visualización, a fin de contribuir a la toma de decisiones.

Su rol requiere combinar la visión de un Product Manager con las habilidades de datos de un analista de Business Intelligence.

[LinkedIn](#) | gaston.laterza@alphazetta.net



αzetta



Ya casi todos laburamos con datos...

OLS Regression Results						
=====						
Dep. Variable:	y	R-squared:	0.900			
Model:	OLS	Adj. R-squared:	0.898			
Method:	Least Squares	F-statistic:	377.4			
Date:	Sat, 16 Dec 2017	Prob (F-statistic):	2.20e-24			
Time:	12:25:46	Log-Likelihood:	-43.114			
No. Observations:	50	AIC:	90.23			
Df Residuals:	48	BIC:	94.05			
Df Model:	1					
Covariance Type:	nonrobust					
=====						
	coef	std err	t	P> t	[0.025	0.975]

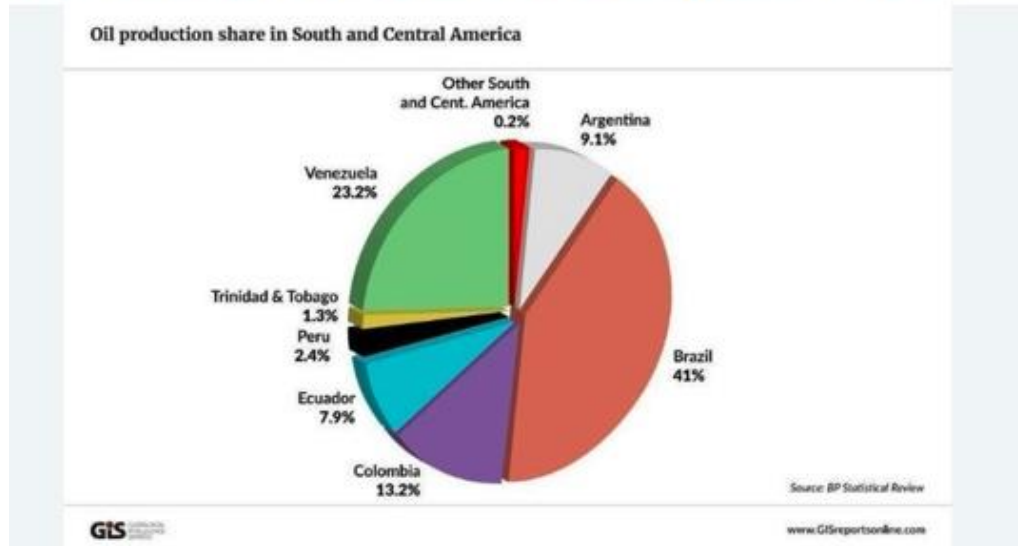
const	1.6573	0.390	4.249	0.000	0.873	2.441
x	2.0667	0.106	-----	-----	-----	-----
=====						

Mala Visualización de Datos

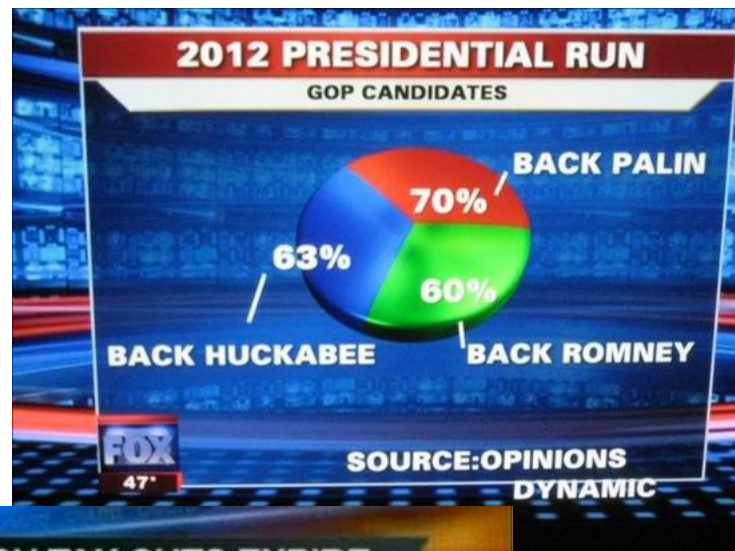


Brazil is expected to be one of the most significant sources of oil supply growth in the next five years thanks to its pre-salt layers. <https://lnkd.in/dVwD-Ez>

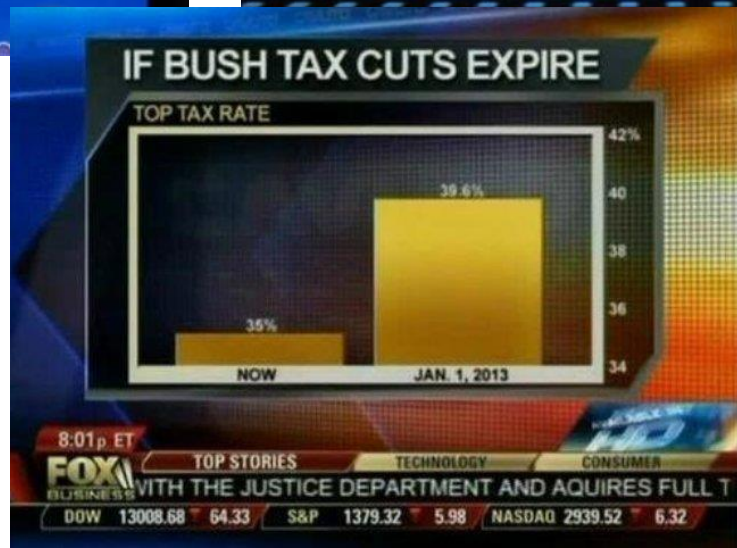
#America #SouthAmerica 🌐 #LatinAmerica #Brazil #energy #oil 🇺🇸
#oilprices 📈 #oilprice 📉 #oilproduction 🇺🇸 #Chevron #ExxonMobil #OPEC



Peor Visualización de Datos



Estos muchachos
se pasan



Objetivo

Comprender los **principios de la visualización**

para poder

brindar explicaciones de nuestros resultados
mediante **gráficos efectivos**.

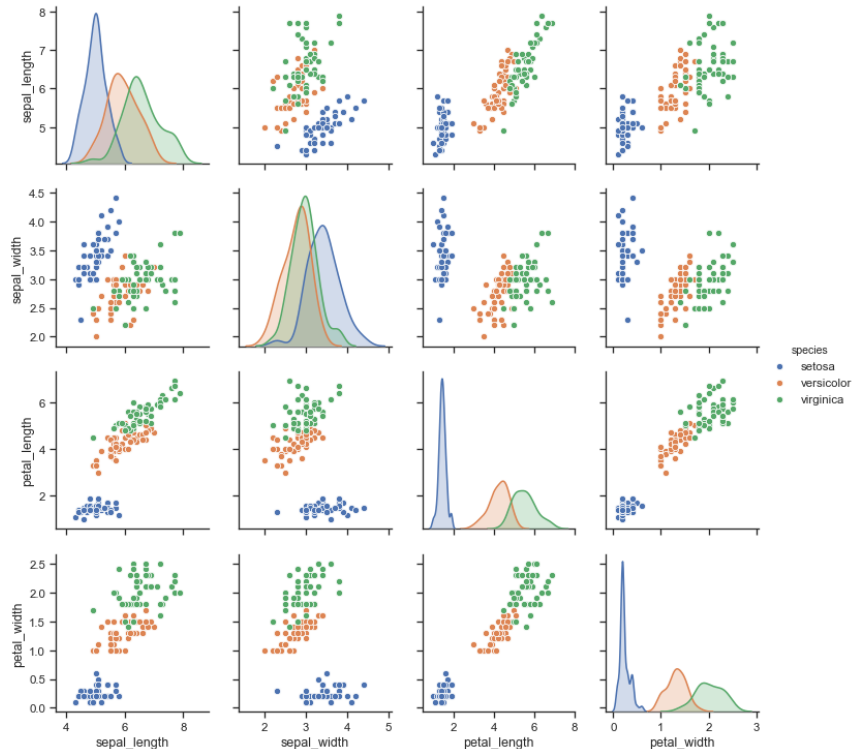
Evitar los errores más comunes.

Agenda

1. El uso de las Visualizaciones de Datos
2. La solución de Pareto: el 20% de los Fundamentals de la Visualización de Datos que te va sacar del apuro el 80% de las veces

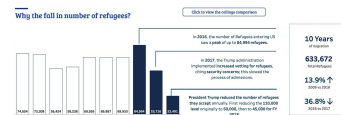
¿Dónde uso visualizaciones?

Análisis Exploratorio

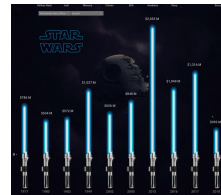


seaborn.pydata.org/examples/scatterplot_matrix.html

Análisis Explicativo



Infografías



¿Dónde uso visualizaciones?

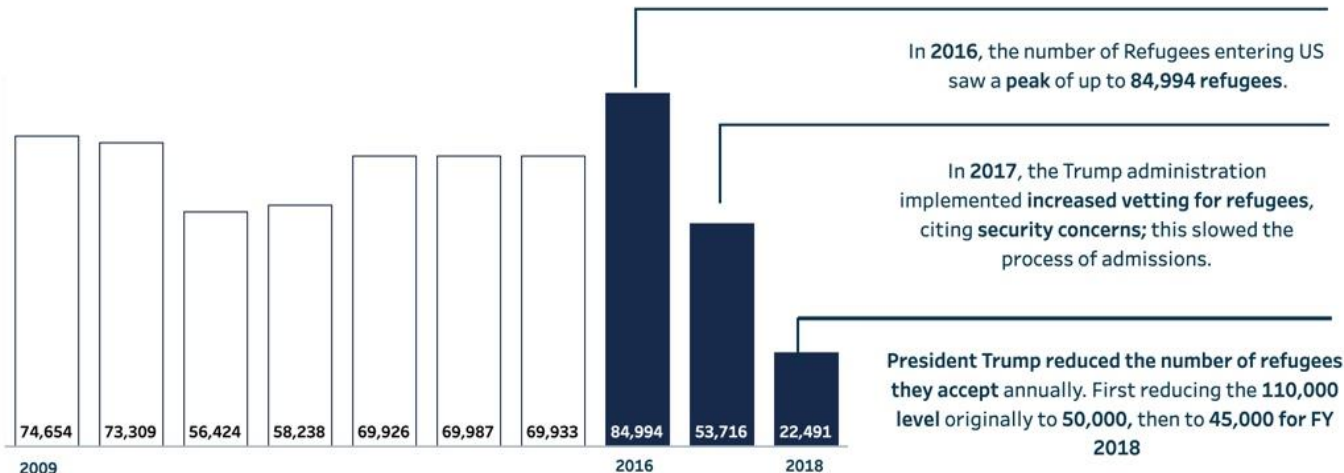
Análisis Exploratorio

Análisis Explicativo

Infografías

Why the fall in number of refugees?

[Click to view the ceilings comparison](#)



10 Years
of migration

633,672
Total Refugees

13.9% ↑
2009 vs 2016

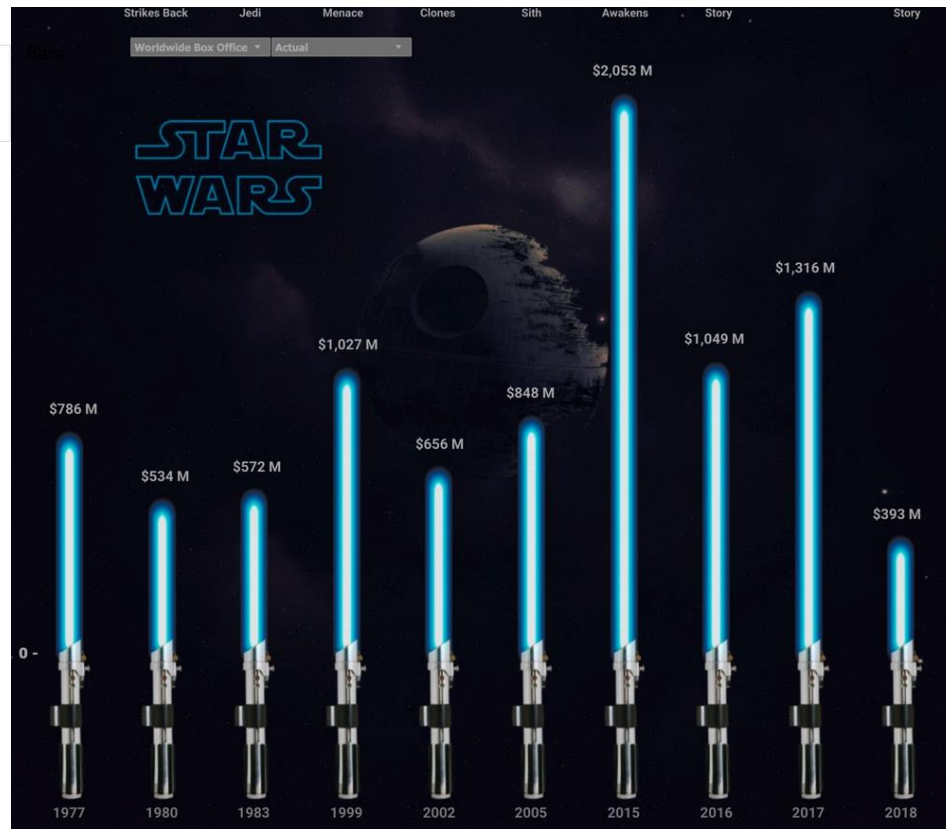
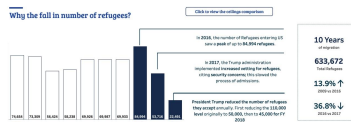
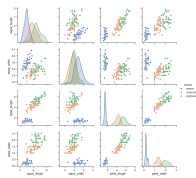
36.8% ↓
2016 vs 2017

¿Dónde uso visualizaciones?

Análisis Exploratorio

Análisis Explicativo

Infografías



public.tableau.com/profile/alexandervar#!/vizhome/StarBars/StarBars

Receta para el éxito

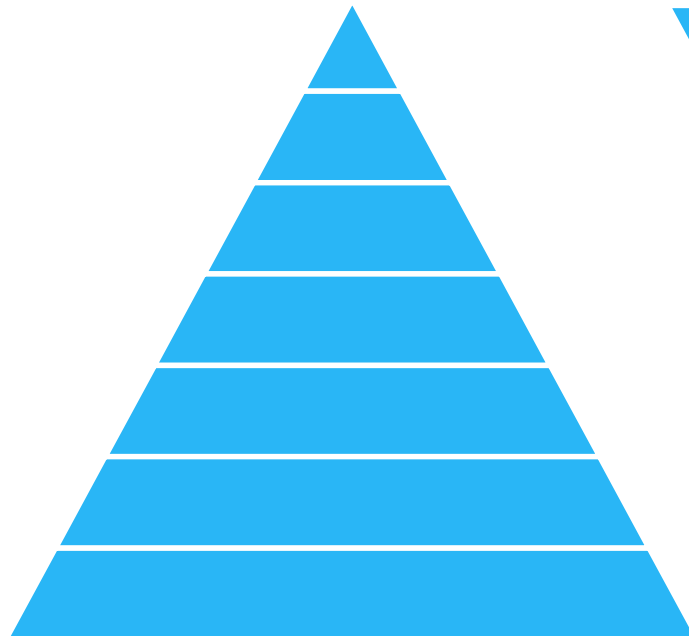
Entender la audiencia

Elegir la visualización correcta

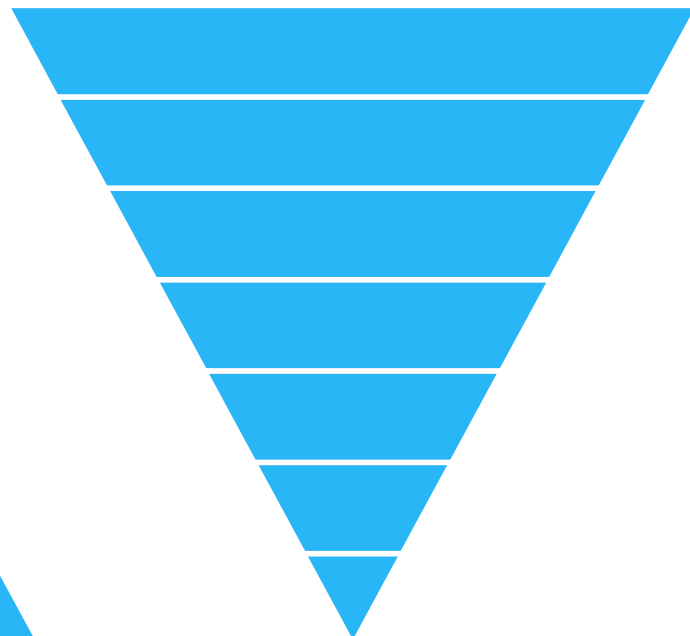
Diseñarla de acuerdo a los Principios

La Pirámide de Audiencia

COMPLEJIDAD



AUDIENCIA



Redes Sociales

Prensa

Blog

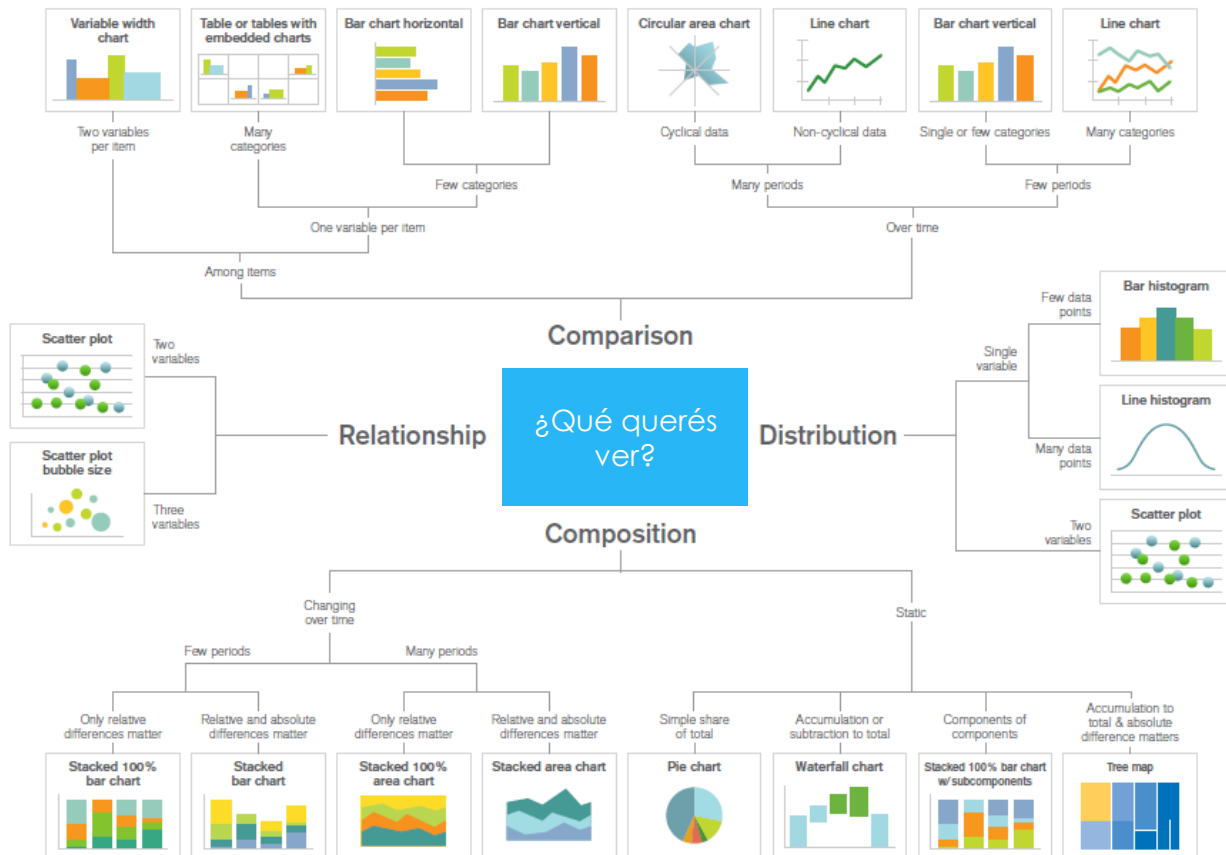
Trabajo

Universidad

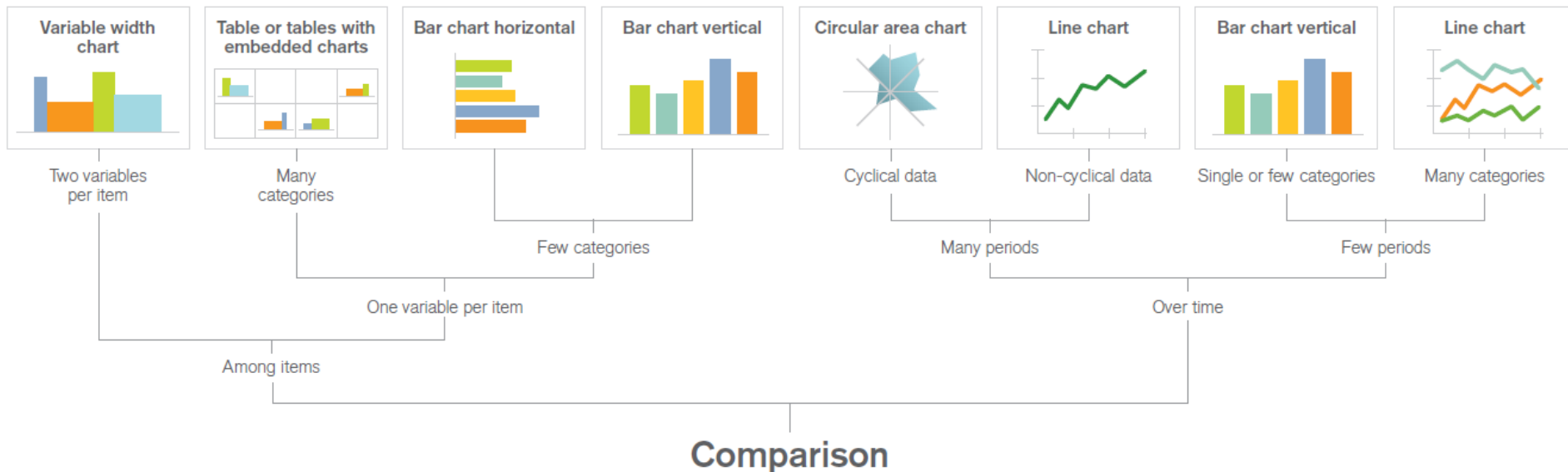
Peer Review

Reporte Técnico

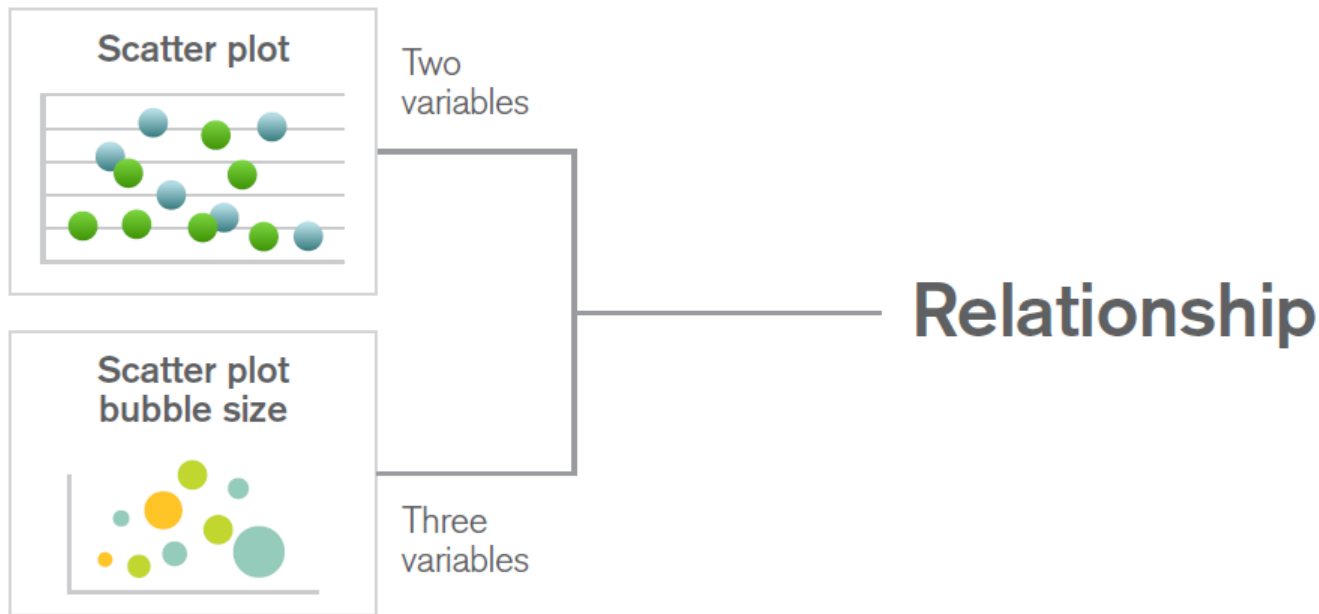
Eligiendo la visualización



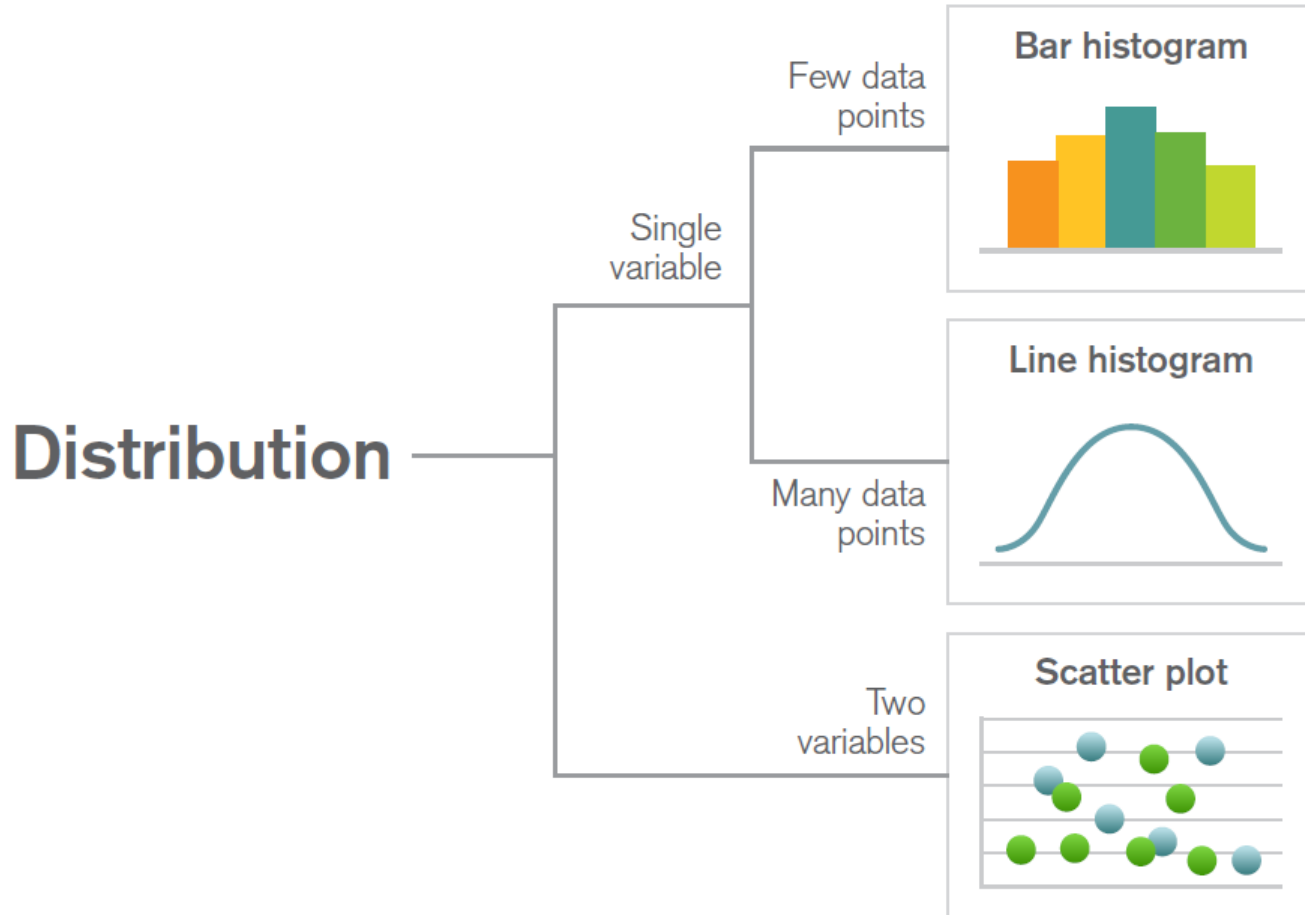
Eligiendo la visualización



Eligiendo la visualización



Eligiendo la visualización



Eligiendo la visualización

Composition

Changing
over time

Few periods

Many periods

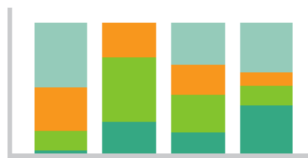
Only relative
differences matter

Relative and absolute
differences matter

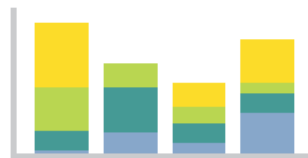
Only relative
differences matter

Relative and absolute
differences matter

**Stacked 100%
bar chart**



**Stacked
bar chart**



**Stacked 100%
area chart**



Stacked area chart



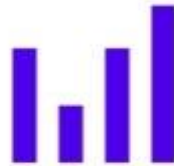
Eligiendo la visualización

depictdatastudio.com/charts/

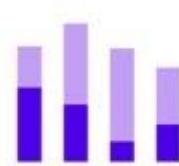
material.io/design/communication/data-visualization.html#



Line

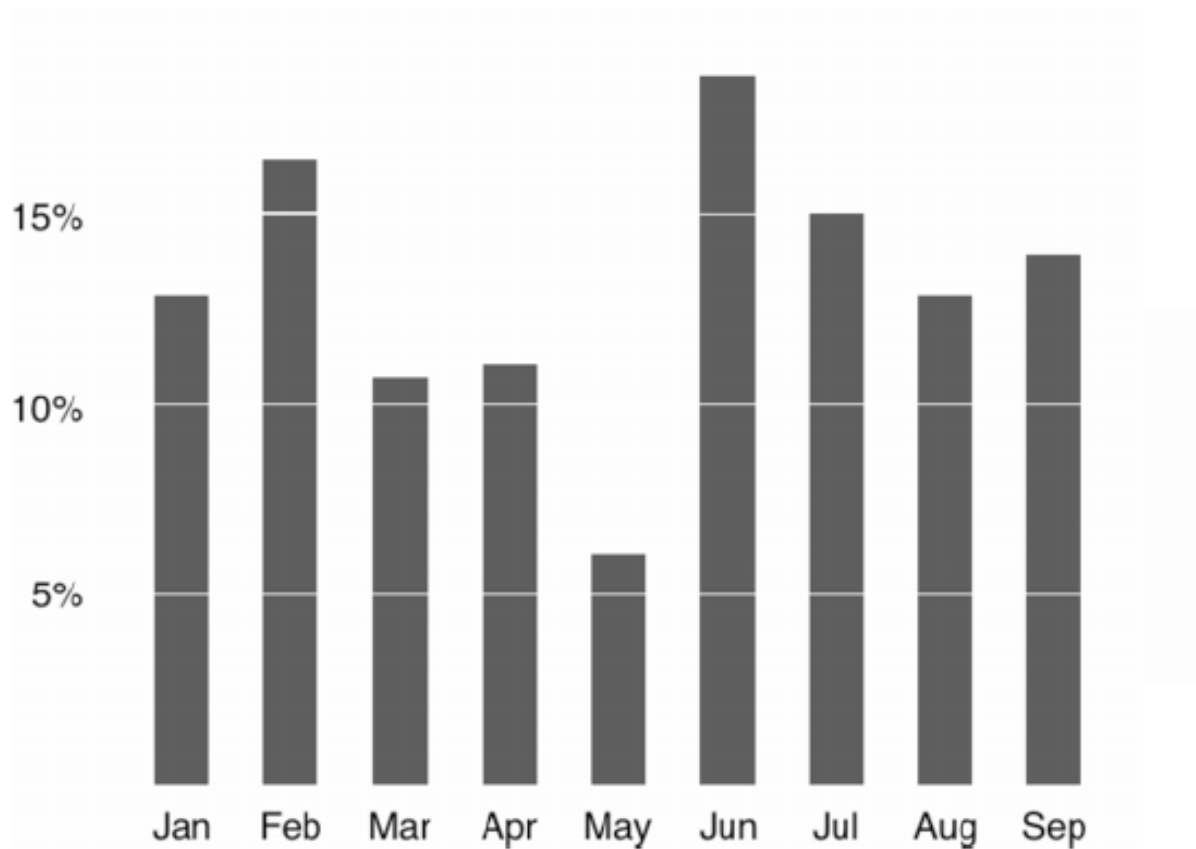


Bar

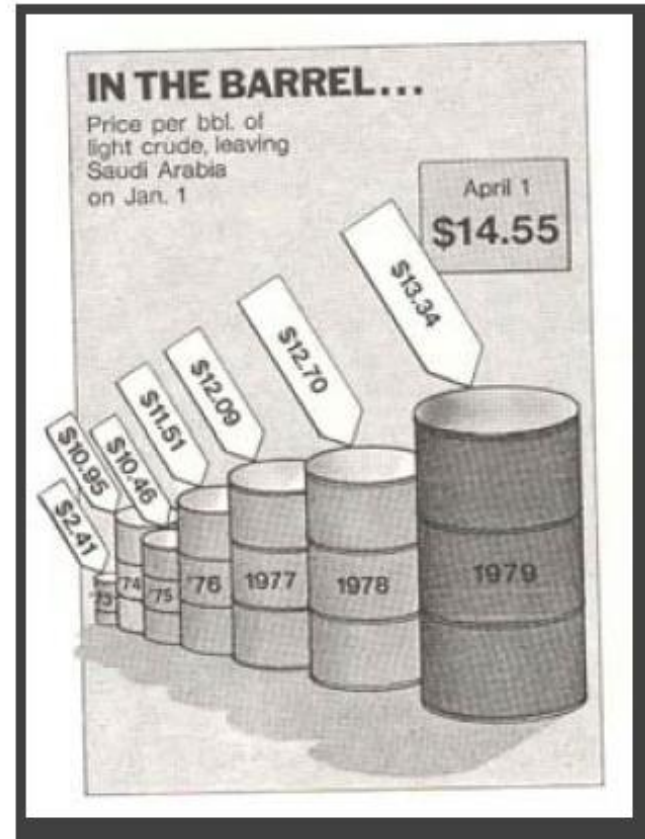
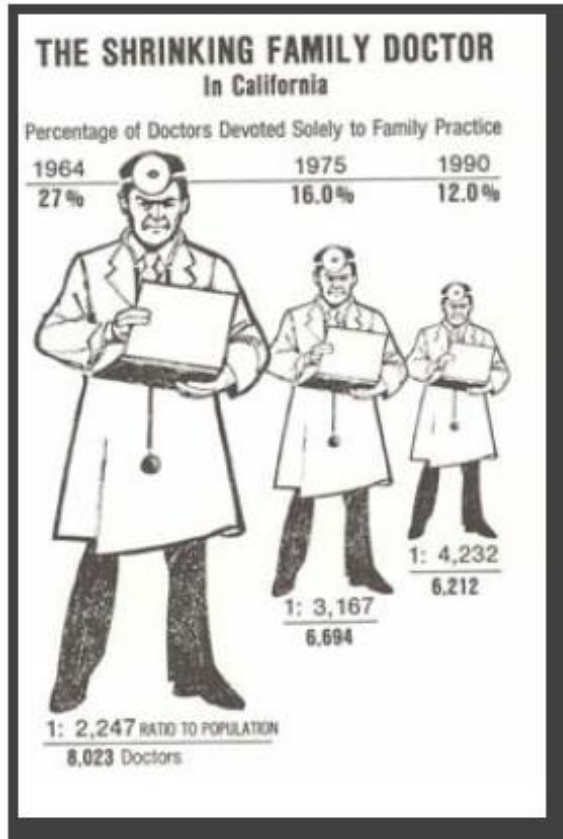


Stacked bar

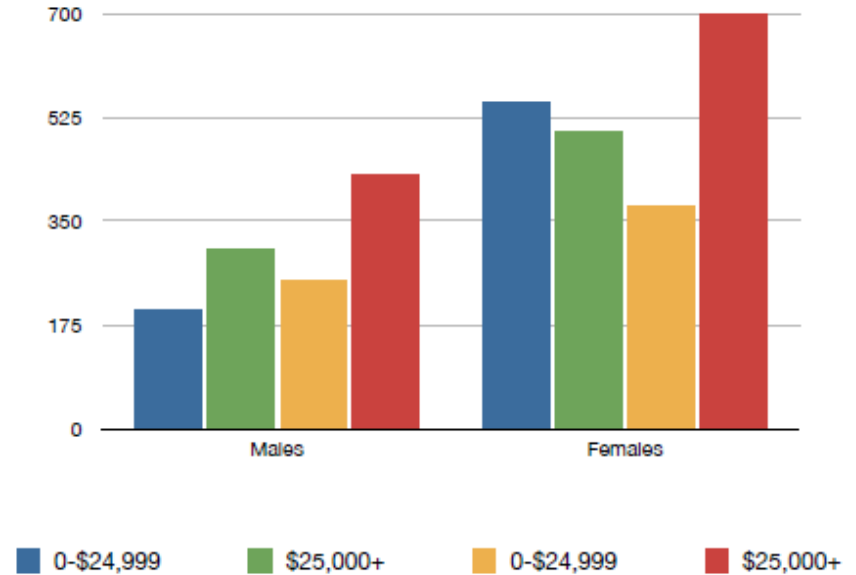
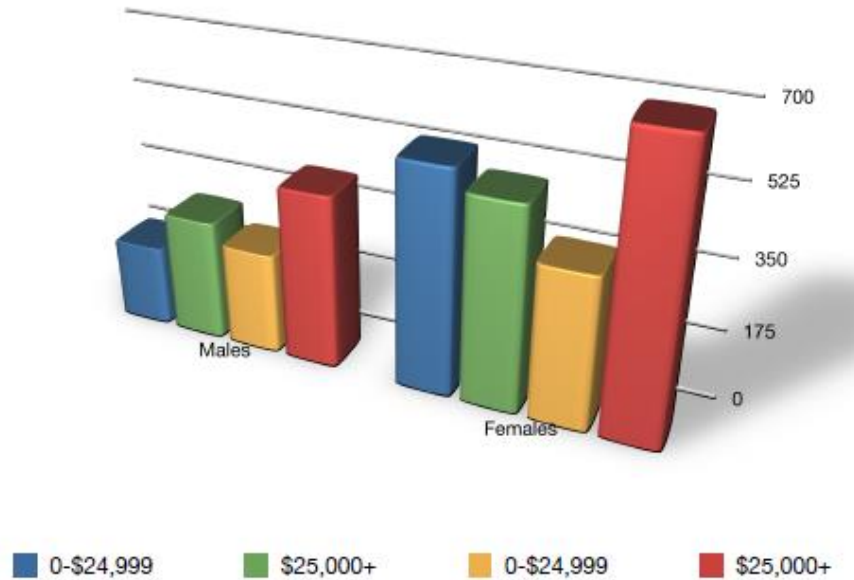
Ratio Tinta-Información



“Lie Factor”



“Lie Factor”

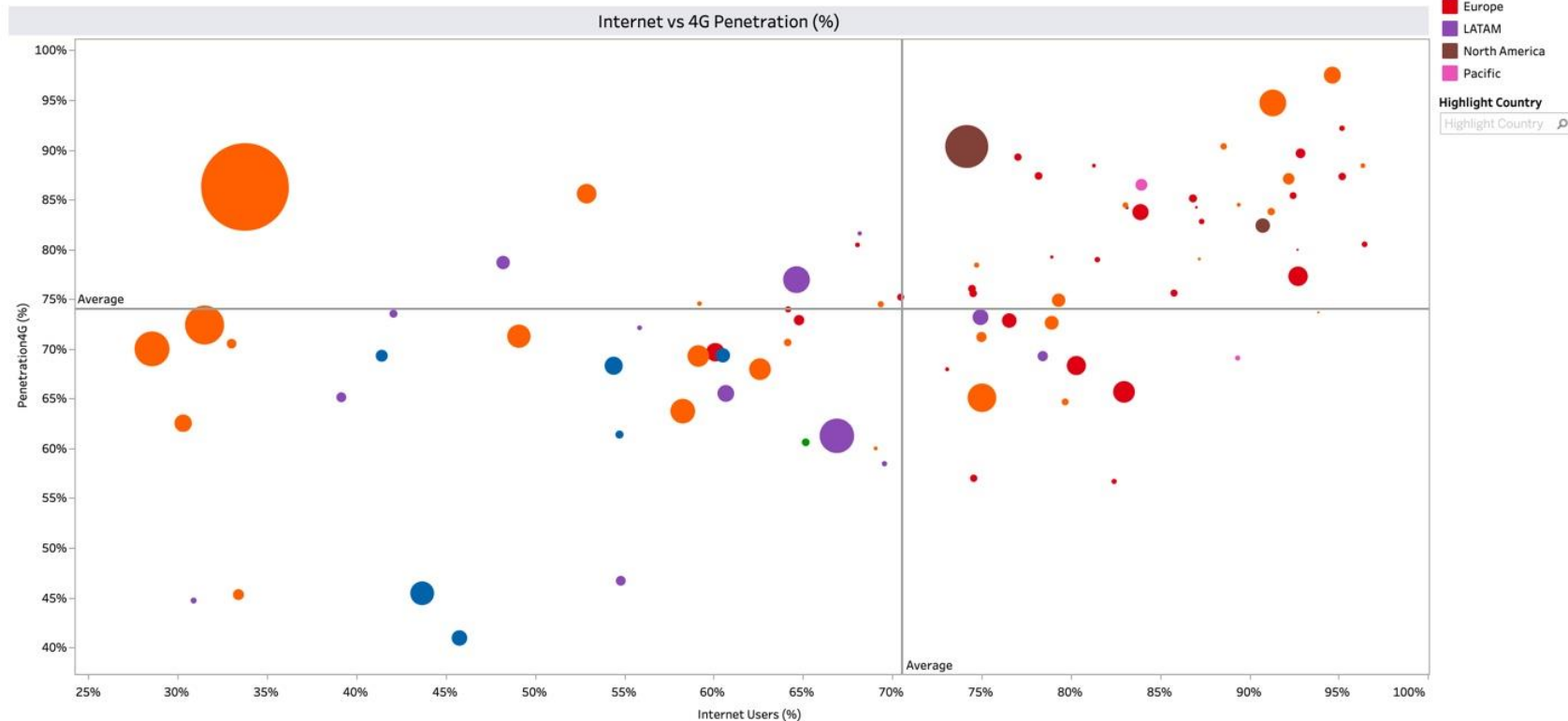


Etiquetas, escalas, información de contexto

Argentina & LATAM in Context: Journey to Maturity

Looking at fixed internet and 4g LTE penetration correlated in this chart, we can segmentate countries into maturity levels.

We can also infer, for less developed countries, when one technology substitutes the other due to infrastructure constraints (ie Pakistan and Costa Rica)



Etiquetas, escalas, información de contexto

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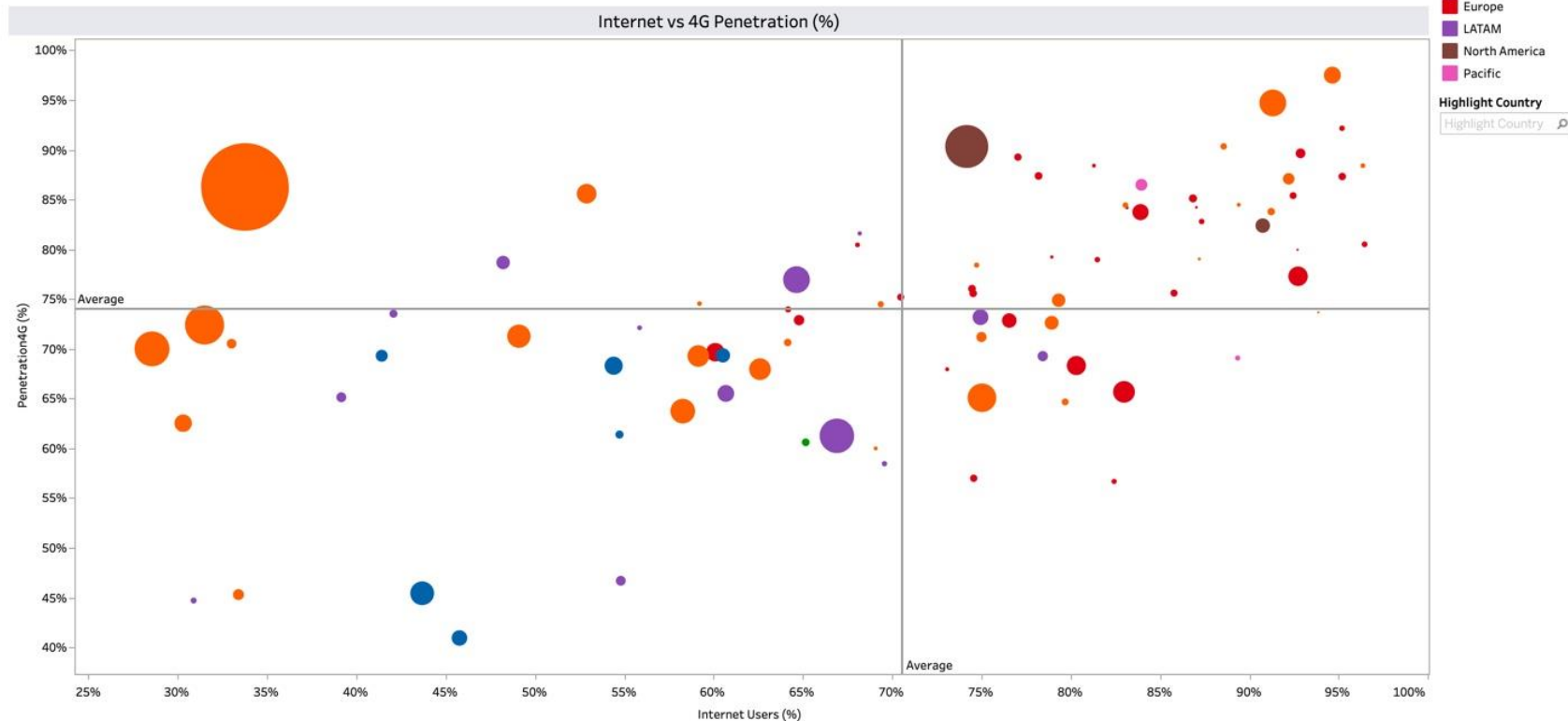


Etiquetas, escalas, información de contexto

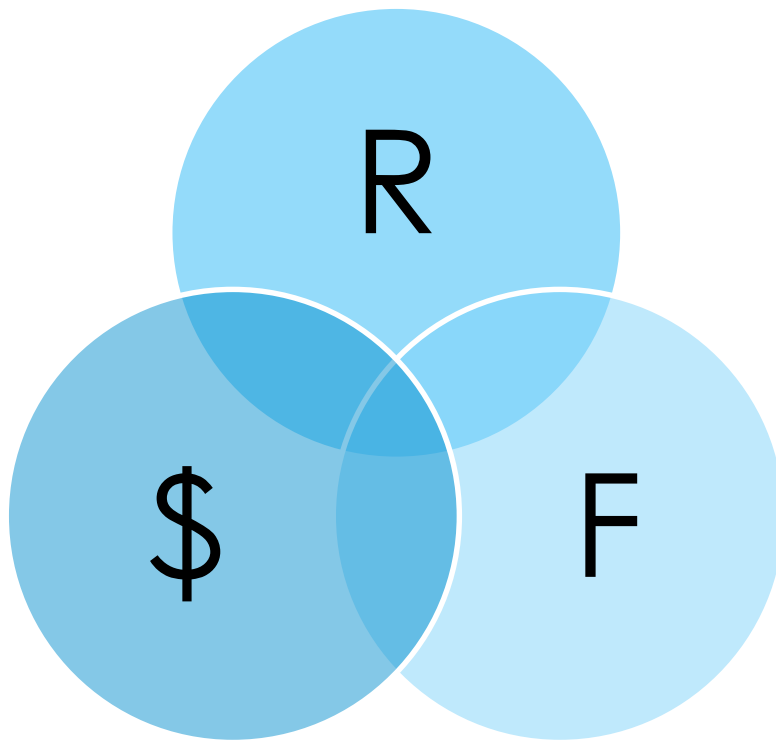
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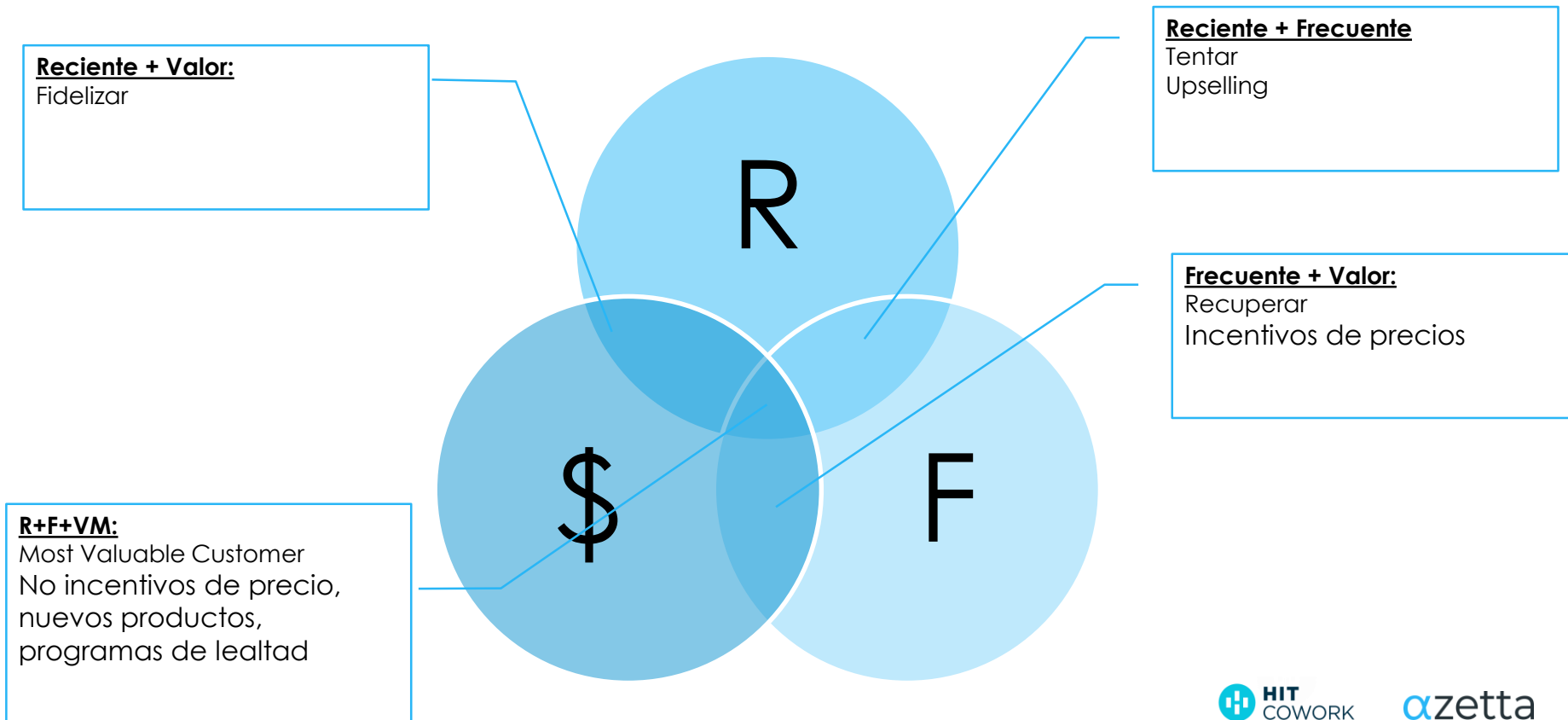
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Un Ejemplo: Segmentación de Clientes con RFM

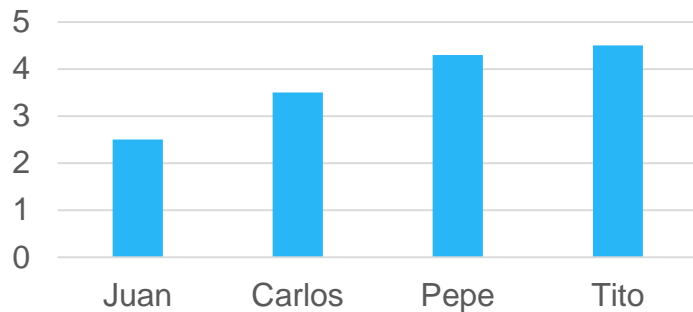


Un Ejemplo: Segmentación de Clientes con RFM

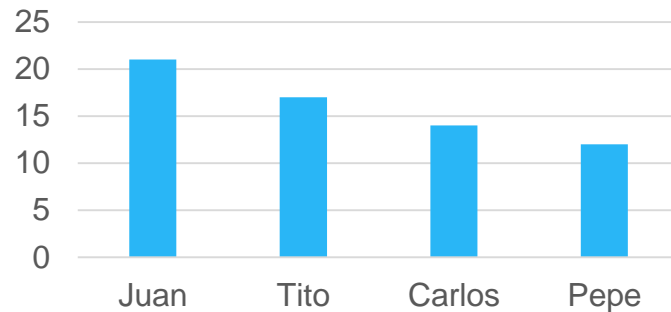


Llevándolo a Visualización

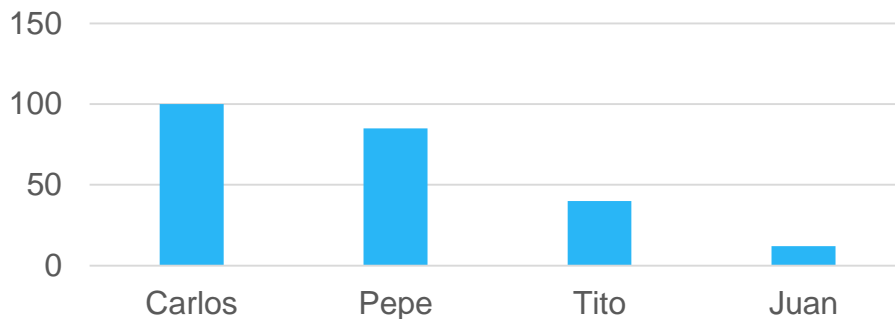
Días (R)



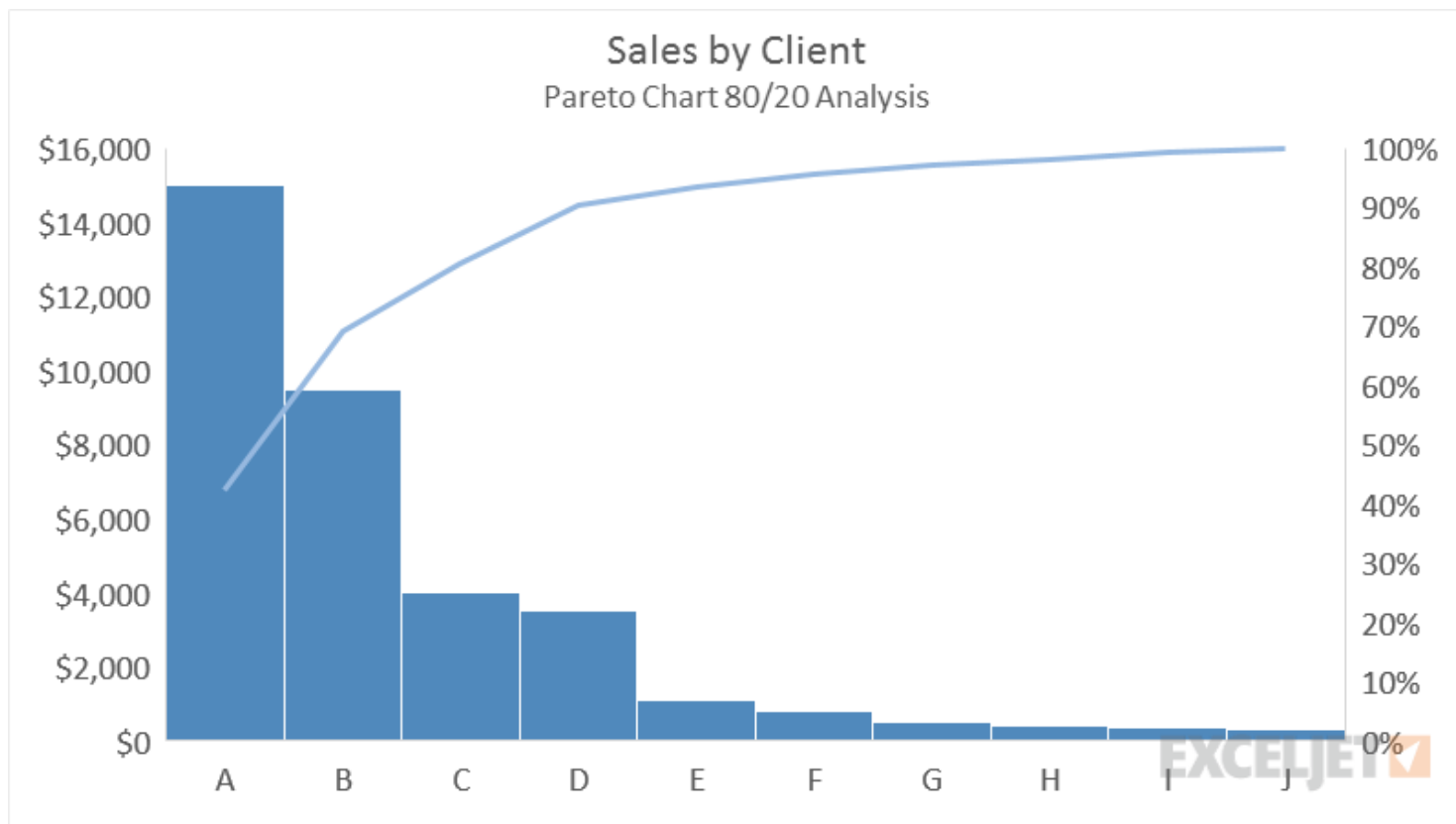
Frecuencia (F)



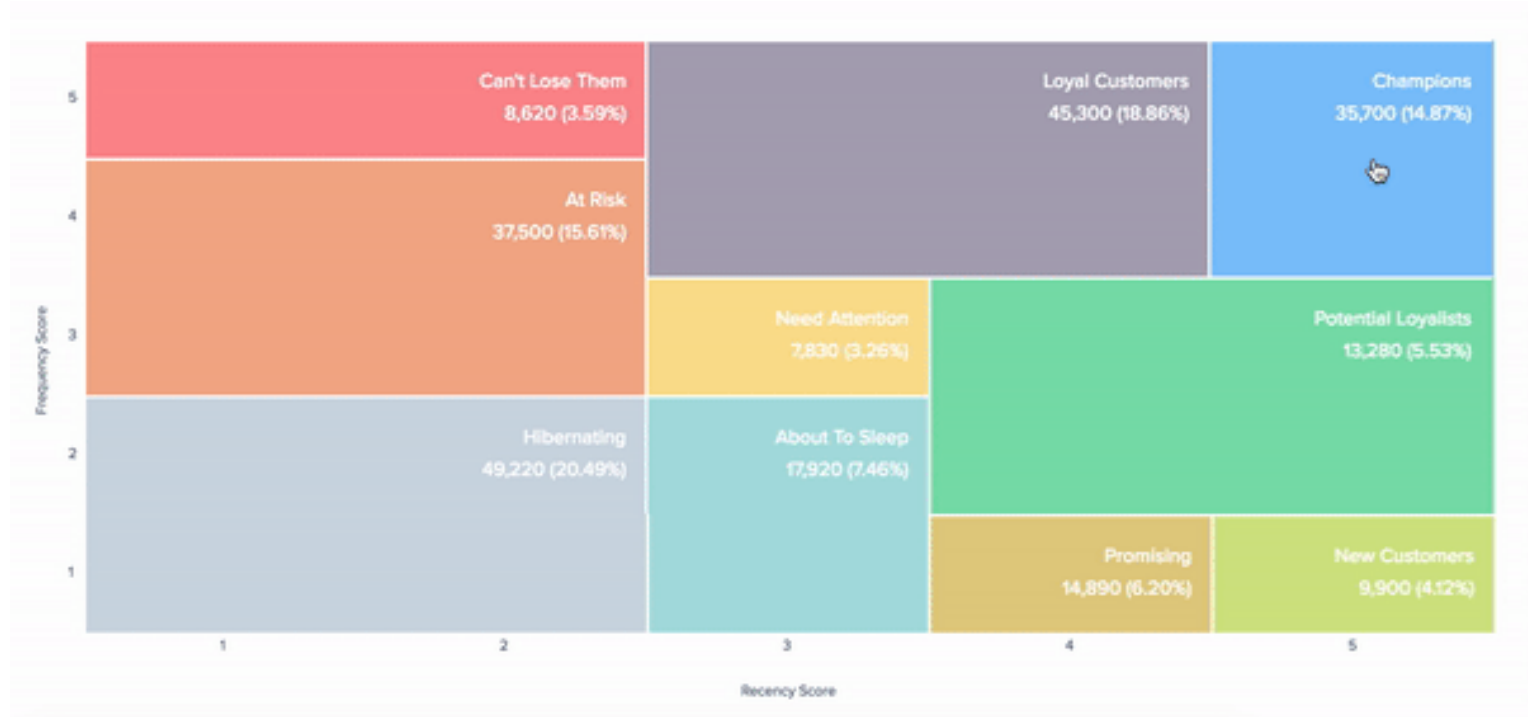
Valor \$



Llevándolo a Visualización



Llevándolo a Visualización



A woman with long dark hair, wearing a dark blue shirt, is pointing at a whiteboard. The whiteboard features a Kanban board with four columns: 'In Progress', 'Discussion', 'FINISHED', and 'Dnd'. The 'In Progress' column has a sticky note that says 'Preparation underway. 04.30' and a yellow sticky note with 'Planning'. The 'Discussion' column has a sticky note that says 'Tip & Game 13.04. Final X.' and a red arrow pointing to the 'FINISHED' column. The 'FINISHED' column has a blue sticky note that says 'MADON RABONI' and a red arrow pointing to the 'Dnd' column. The 'Dnd' column has a sticky note that says 'To go! Dnd' and a yellow sticky note that says 'Total'. There are also some handwritten notes and arrows on the whiteboard.

El mejor Ejemplo

Data Viz done right

https://public.tableau.com/views/DataRevelations_DataVizSociety_Survey2019/Home?%3AshowVizHome=no

SURVEY RESULTS

1) Question selector

Which of these charts have you used in production in the last 6 months?

2) Breakdown by

Years in data viz

Which of these charts have you used in production in the last 6 months?

(| = overall)

MULTI SELECT GAP ANALYSIS



Breakdown:

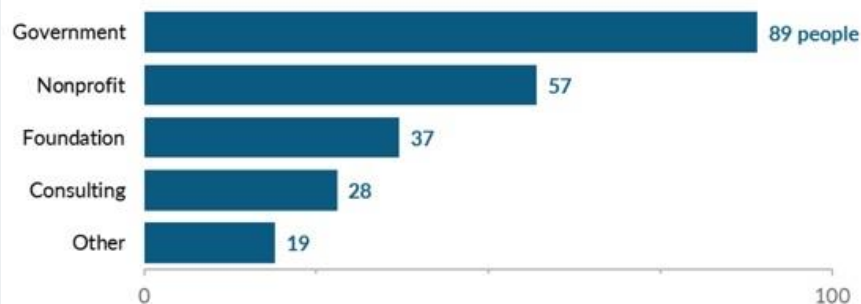


Repasando...

Esto es el 20%

- Ratio tinta-información
- Nada de Lie Factor
- Etiquetas y contexto

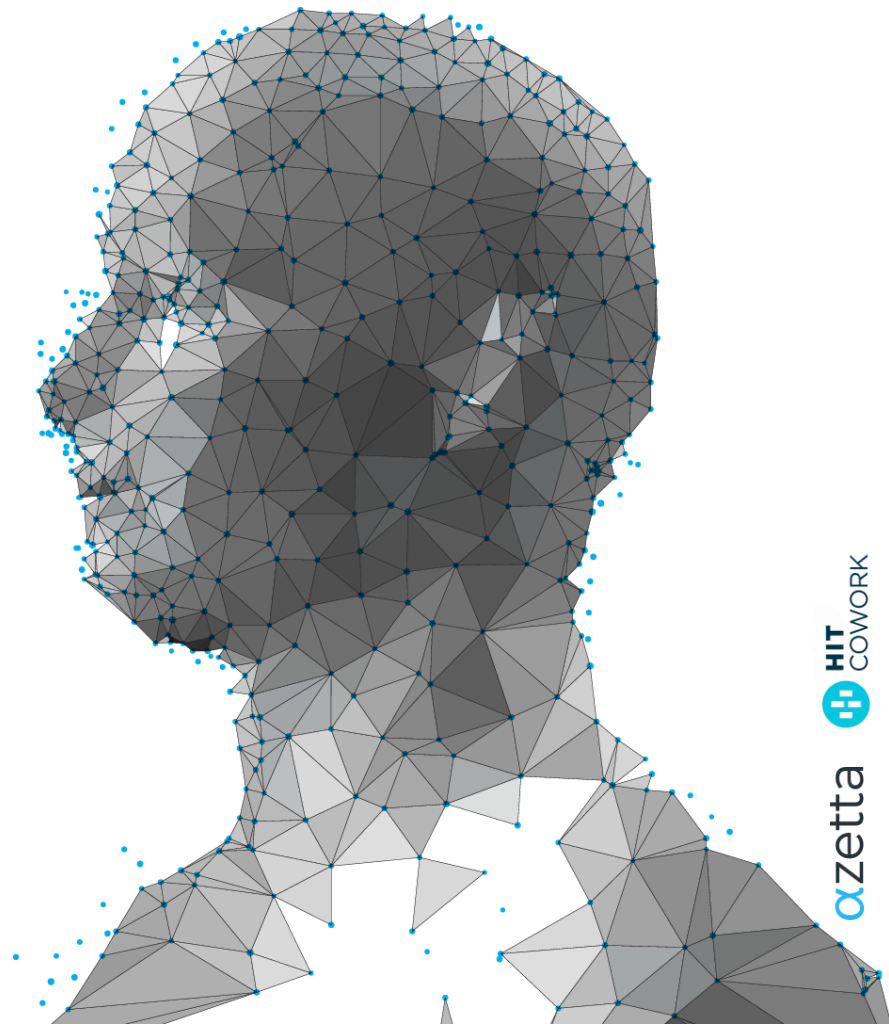
Survey answers by Organization type



Conclusión

“Seek simplicity, and
distrust it”

Alfred North Whitehead



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