The art of data visualization

DATA VISUALIZATION IN EXCEL

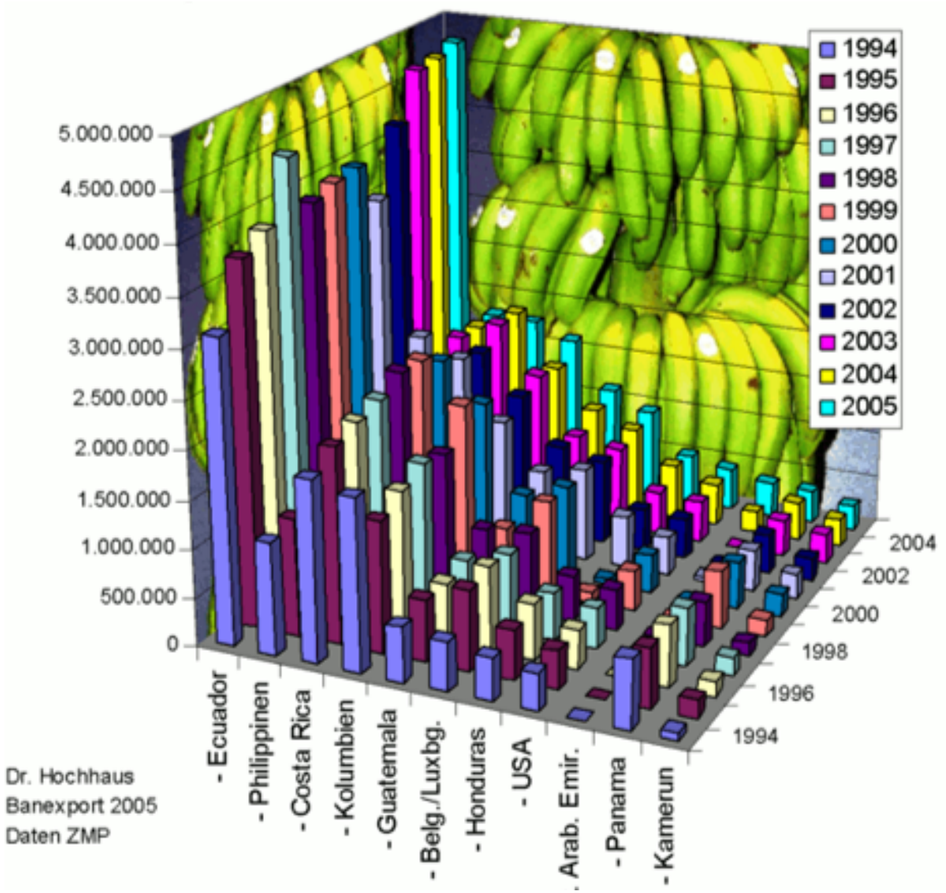


Agata Bak-Geerinck
Senior Data Analyst, Telenet

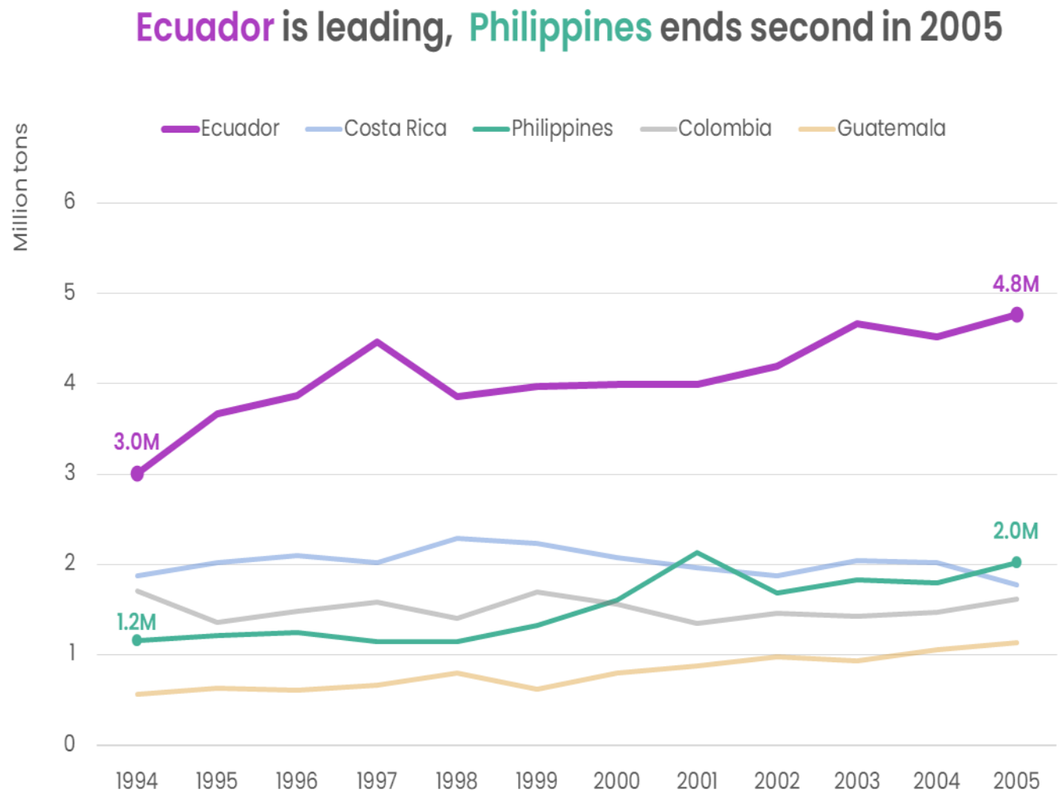
datacamp

When less is more

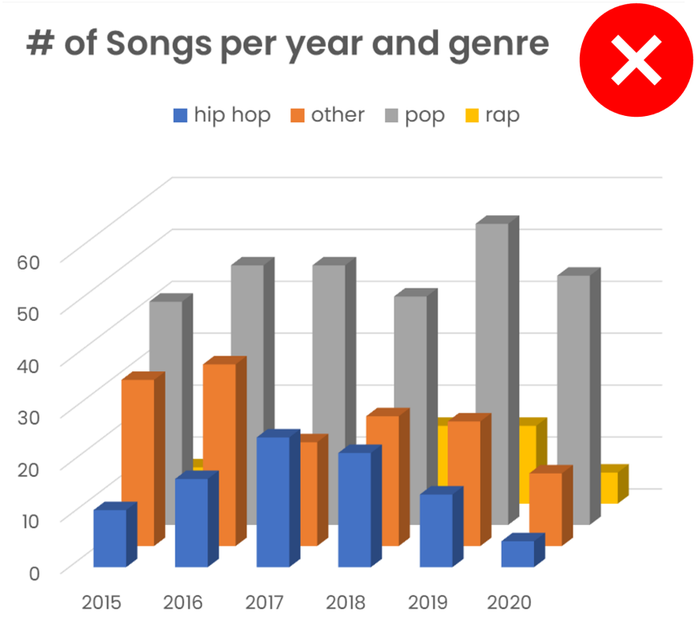
Banana export 1994-2005, version 1

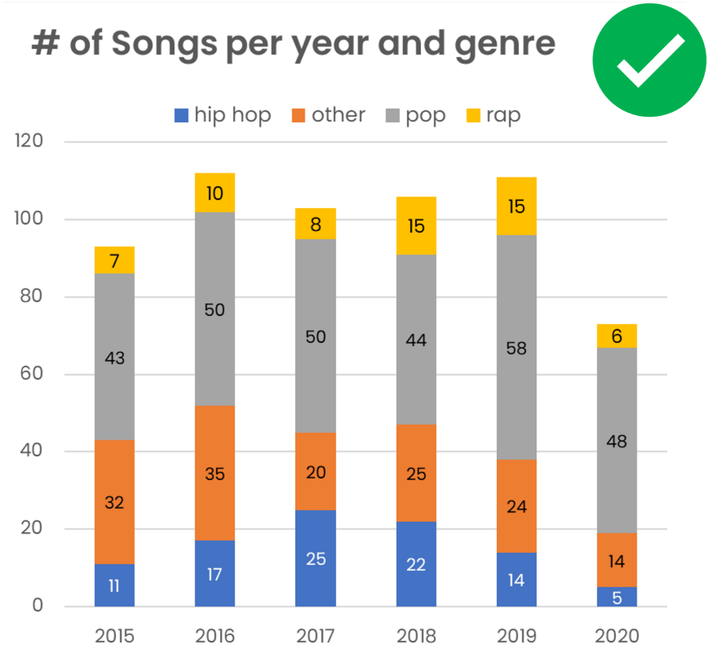


Banana export 1994-2005, version 2



Two dimensions OR three dimensions?

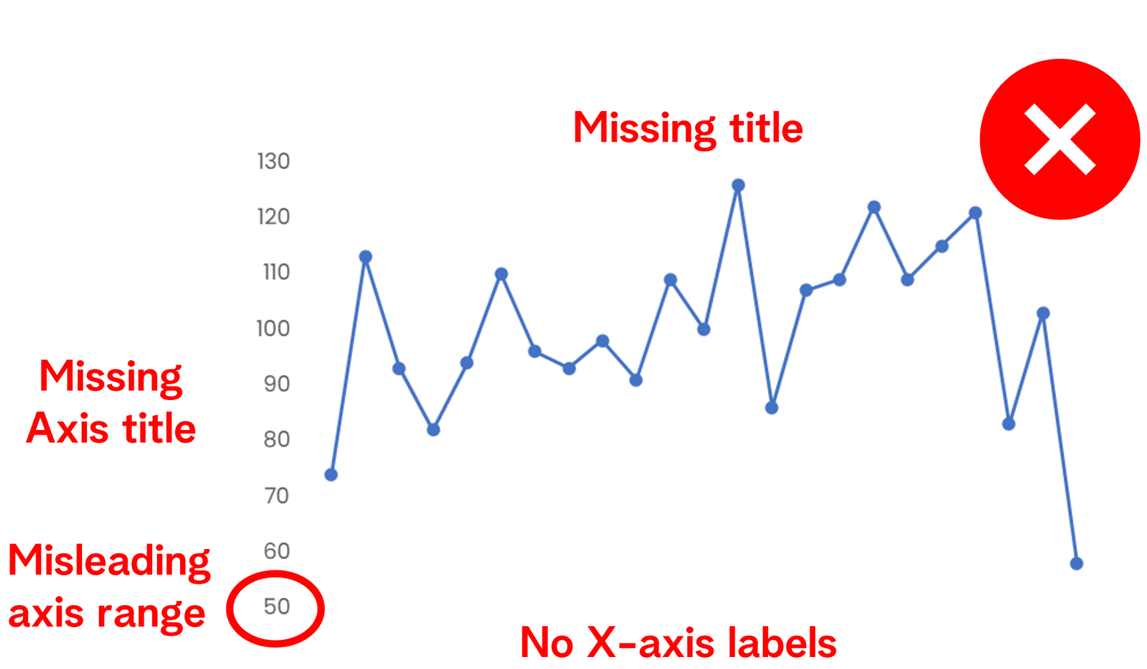




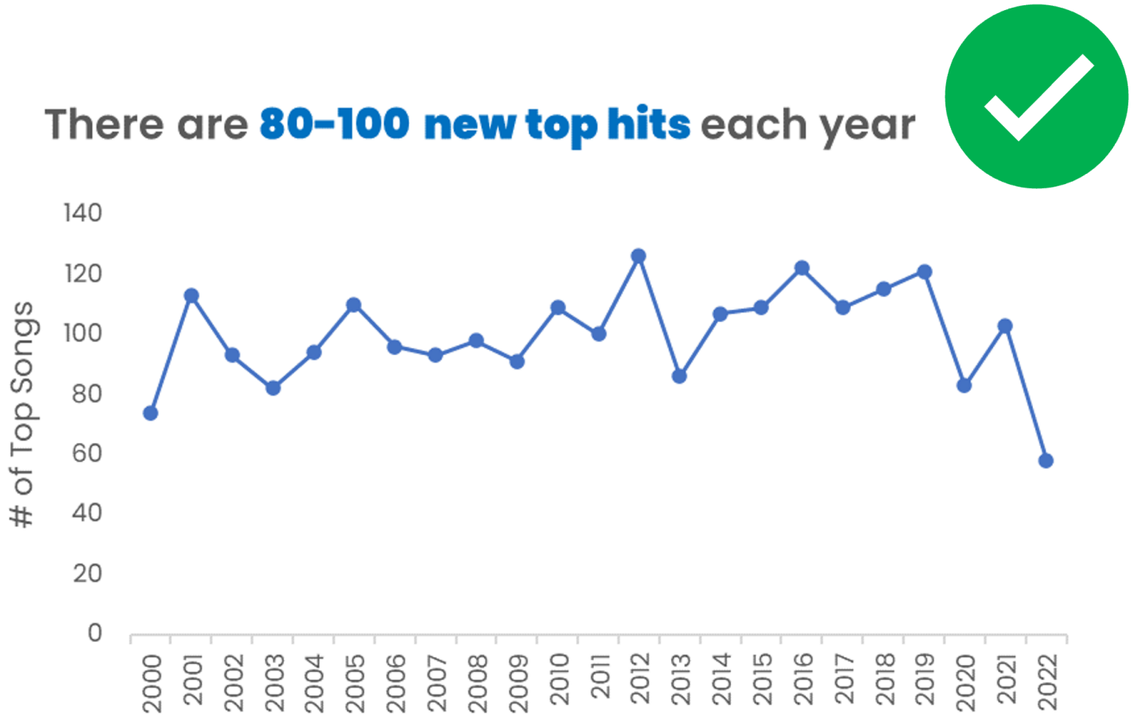
- Hard to read the correct values
- Perspective distorts the chart and confuses the eye

- Easy to interpret
- Versatile and distraction-free

Labels, legends, and titles

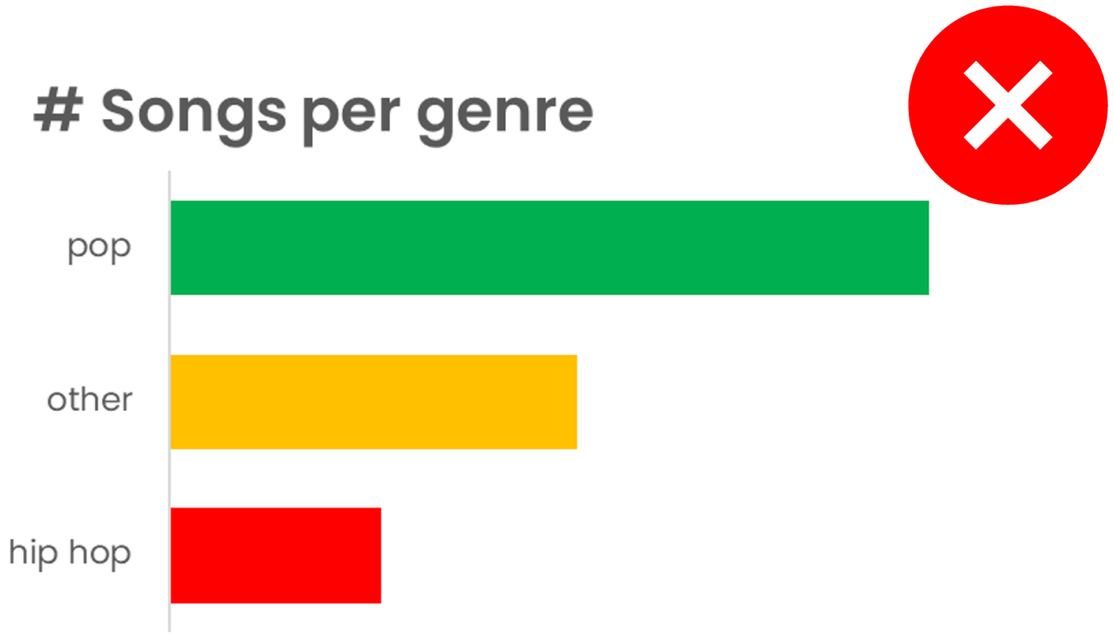


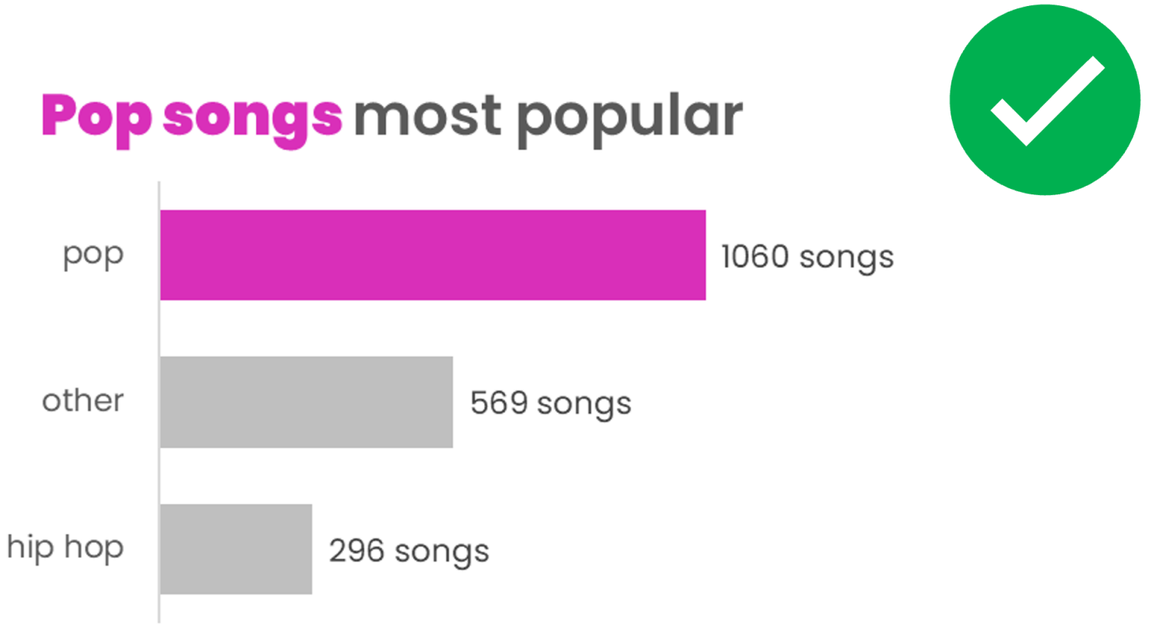
- Not self-explanatory
- Axis does not start at `0` and is misleading



- Clear axes, labels, and informative title
- Y-axis starting at `0` is the best practice

Color: an ally or enemy?

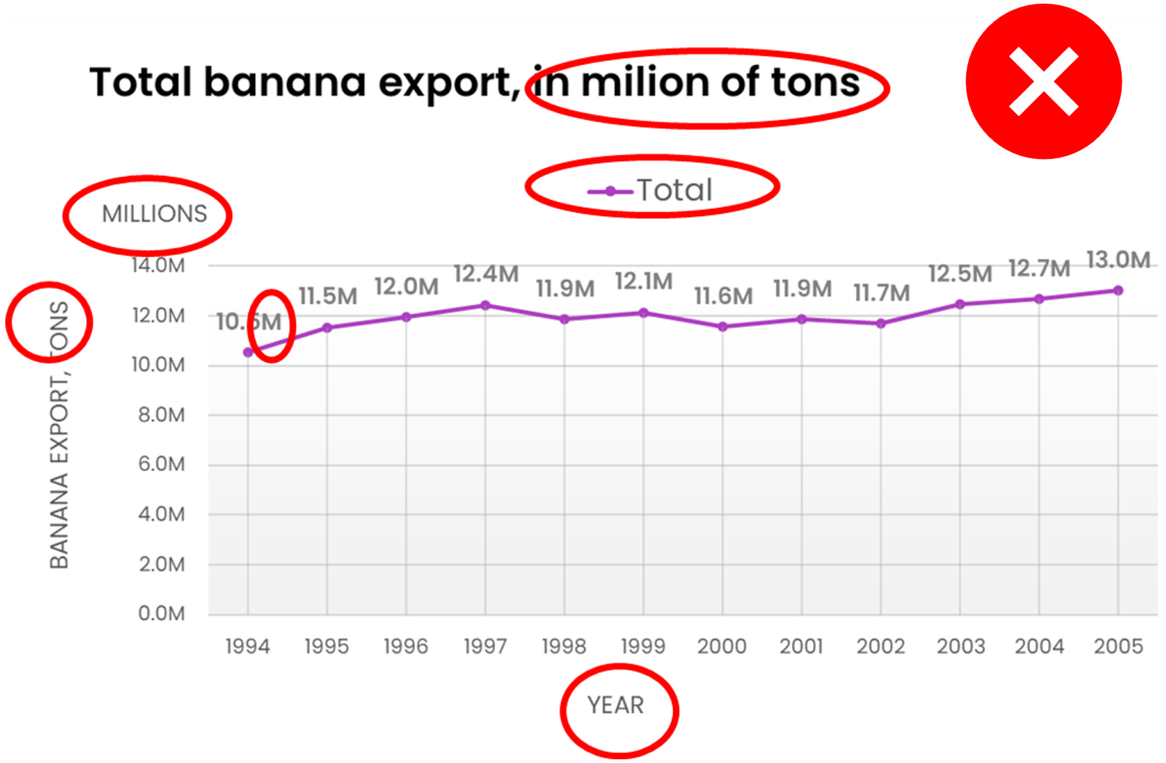




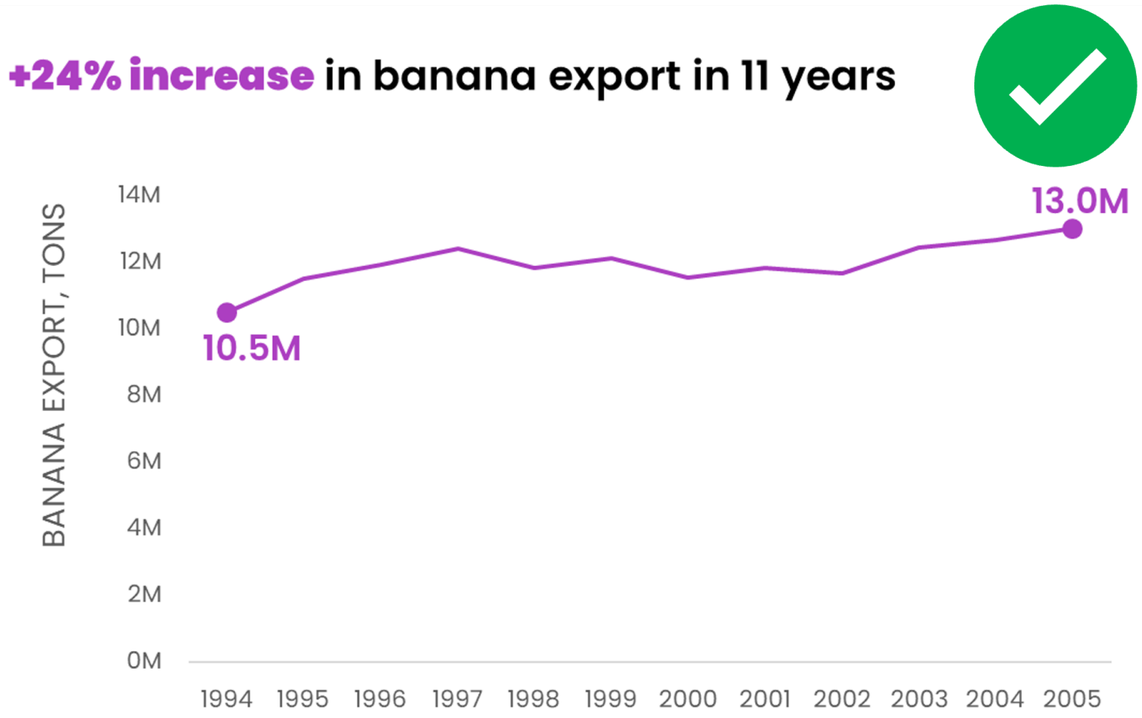
- "Rainbow" charts - colors bring no value
- Avoid using red/amber/green in categorical legends

- Use color to draw attention to a data point
- Repetition of color highlight in title strengthens the message

The Great Chart Cleanse - decluttering of charts

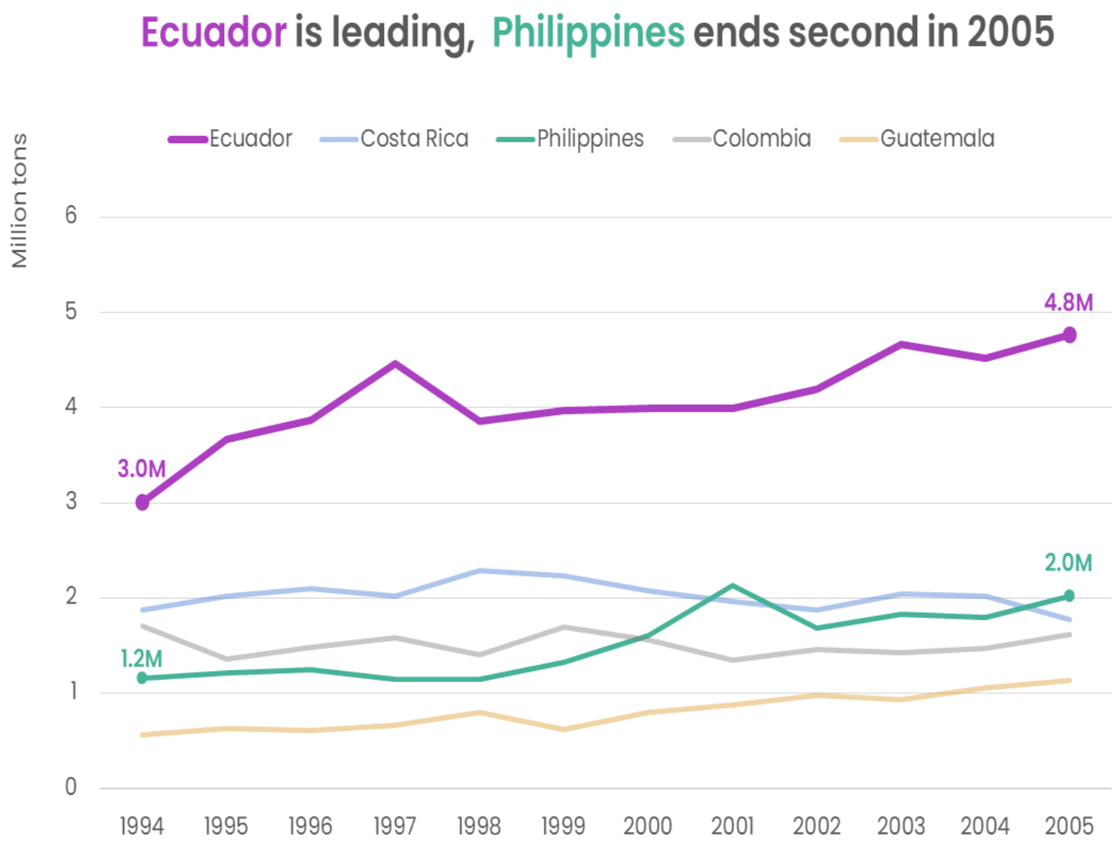


- Redundant axes and chart titles
- Unnecessary legends



- Evaluate each chart element
- "Less is more"

Accentuating the main message like a pro



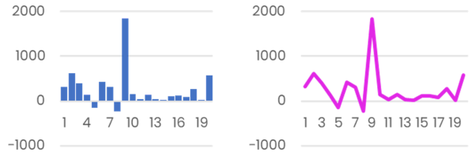


- Bring focus to selected chart elements
- Use title and color to draw attention to the main message
- Use labels sparingly to highlight main data points
- Consider graying out or increasing the transparency of less important data points

The lost art of "chartology": choosing the perfect graph

Comparison & evolution:

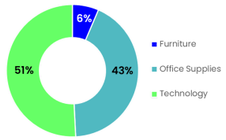
- Clustered bars and columns
- Line and Area charts
- Radar chart



Composition:

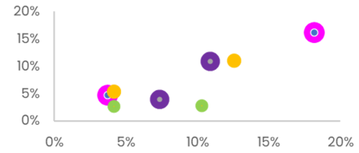
- 100% stacked bar, column, area charts
- Pie and doughnut charts
- Waterfall chart





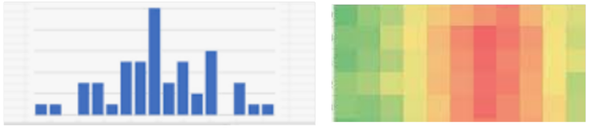
Relationships:

- Scatter plots
- Bubble charts



Distribution:

- Histograms
- Box plots
- Heat and density maps





- Each use case has a chart type (or two)
- Experiment until chart looks good
- Consider chart variants
- Get inspiration:
  - DataCamp data viz cheat sheet
  - Storytelling with Data blog and book

[1] https://www.datacamp.com/cheat-sheet/data-viz-cheat-sheet and https://www.storytellingwithdata.com/

Let's practice!

DATA VISUALIZATION IN EXCEL

Chart Clinic 1 on 1

DATA VISUALIZATION IN EXCEL



Agata Bak-Geerinck
Senior Data Analyst, Telenet

datacamp

Let's practice!

DATA VISUALIZATION IN EXCEL