Hi! Come closer. I’m a poster that helps you choose the right chart.

1. Which aspect of the data do we want to show?

COMPARISON

DEVIATION / DIFFERENCE

PART AND WHOLE

HIERARCHY

CHANGE OVER TIME

DISTRIBUTION

CORRELATION / RELATIONSHIP

PROFILING

PROCESS / STAGES / FLOW

2. Choose from these chart types. The first one in each group usually works best

COMPARISON

- **Column chart**
- **Bar chart** — Easier to read with long category labels
- **Grouped bar chart** — More than 2 series can be hard to read
- **Lollipop** — Focus on the endpoints, not the lines length
- **Packed bubble chart** — Best when values differ a lot, exact comparison is less important
- **Pictogram**

DEVIATION / DIFFERENCE

- **Diverging** — Negative values to the left, positive values to the right
- **Stacked diverging** — For survey results
- **Bidirectional** — Use only when differences within a row are meaningful
- **Slope chart** — Clearly shows change while keeping absolute values
- **Dumbbell chart**
- **Bullet chart** — Can be used with cutoffs only, without internal segments

PART AND WHOLE

- **Stacked column chart** — In most cases better than pie chart
- **Pie chart** — If there are many categories, group the smaller ones into “Other”
- **Donut chart** — You can show the total in the center
- **Waffle chart** — Better for showing the share of 100%
- **Treemap**
- **Pareto**
- **Treemap**
- **Sunburst** — Labels are hard to place. Alternative: a Sankey diagram

CHANGE OVER TIME

- **Line chart** — If data is irregular, show the actual observations as dots
- **Column chart** — For multiple time series, lines work better
- **Slope chart** — Use no more than two time points
- **Gantt chart**
- **Bubble chart**
- **Candlestick chart**
- **Area chart** — Shows change in the total and the baseline series. Can be normalized to 100%
- **Streamgraph** — Corners are usually smoothed. Works well for large shifts in shares of the whole
- **Dumbbell chart** — A compact way to show change between two points or a range (min/max)
- **Heatmap**
- **Bump chart** — Clearly shows changes in rank

DISTRIBUTION

- **Histogram**
- **Box plot** — Better to sort by the median (shown by the line inside the box)
- **Barcode** — If you need to show every value
- **Strip plot** — If many points overlap, add transparency (and/or jitter)
- **Pareto**
- **Dumbbell chart** — A compact way to show change between two points or a range (min/max)
- **Population pyramid**

CORRELATION / RELATIONSHIP

- **Scatter plot**
- **Split bars** — In many cases, an effective alternative to a scatter plot
- **Heatmap**
- **Slope chart** — A rare case where connecting categorical values with lines is justified
- **Bubbled scatter plot** — Adds a third variable via marker size
- **Network graph** — You can encode the number of links with line thickness
- **Chord diagram**

PROFILING

- **Split bars** — Preferable to a radar chart, which should generally be avoided
- **Split bars horizontal**
- **Heatmap**
- **Parallel coordinates**
- **Bubble chart**

PROCESS / STAGES / FLOW

- **Sankey diagram**
- **Gantt chart**
- **Waterfall** — Good for budgets, may include negative values

You can always find the latest version of this poster in PDF format on the website:

bogachev.fr

3. Remove the excess, keep the color palette minimal, and state the conclusion in the headline

Inspired by the FT Visual Vocabulary guide.

This is not a comprehensive guide to choosing the right type of data visualization. Distribution is welcome in any form, author attribution is at your discretion. Alexandre Bogachev, 2025. bogachev-aleksandr