DATA VISUALIZATION

WORKHORSE VISUALIZATIONS

LINE CHART/RUG CHART

Gaps in the number line: **absence** of those numeric values in the data.

Remember: this is (possibly) different from the order that values appear in the dataset – since it is a number line, it shows where the values fall numerically.

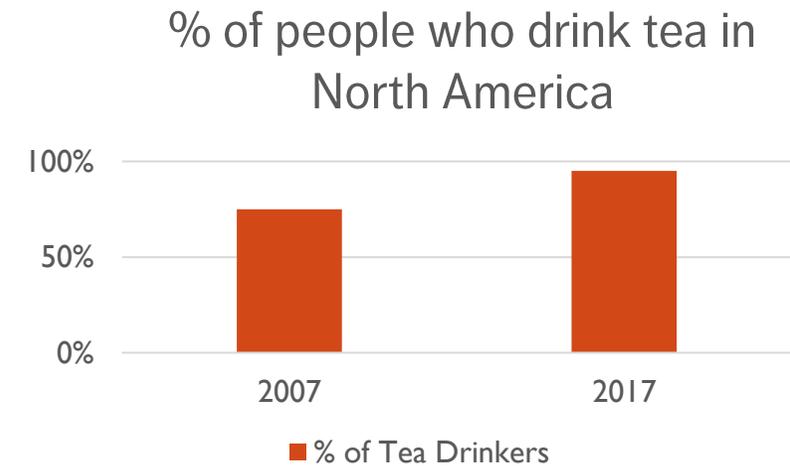If some values are identical, they lie on top of each other (use **jitter**?).

SIMPLE TEXT

One or two numbers to focus on.

Good at "setting the scene".

Draws focus to an area of the report.

% of people who drink tea in North America

95% of the population
drinks tea today compared to
75% in 2007

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TABLES

Tables interact with our **verbal** system, which means we **read** them:

- used to compare values

- audiences will look for their rows

Table design needs to **blend** into background

- the data should stand out, not the borders

- dense table/data: use alternating row colour

Name	Last Year	This Year
Bob	20	30
Fred	30	40
George	10	15

Name	Last Year	This Year
Bob	20	30
Fred	30	40
George	10	15

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# TABLE HEATMAPS

Leverage colour to convey magnitude

- use **single colour saturation** rather than differentiation (different colours)

- with a legend (white = low, blue = high), numbers can be removed without altering the message

	Last Year	This Year	Next Year	Optimum
George	20	20	20	20
Peter	40	35	30	25
John	10	10	5	5
Sandra	25	30	35	40

	Last Year	This Year	Next Year	Optimum
George	20	20	20	20
Peter	40	35	30	25
John	10	10	5	5
Sandra	25	30	35	40

	Last Year	This Year	Next Year	Optimum
George				
Peter				
John				
Sandra				

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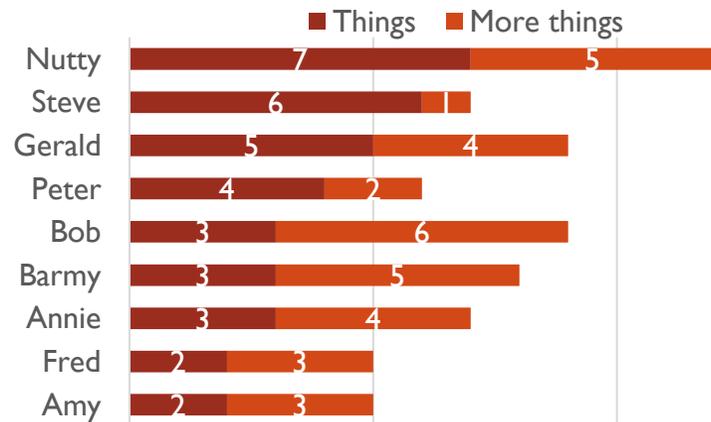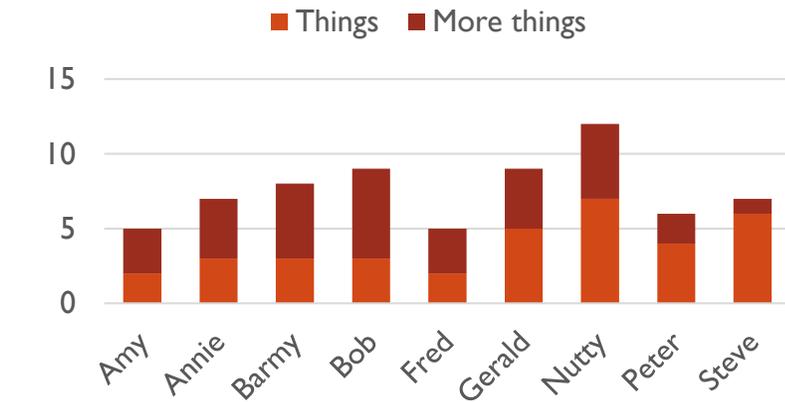
BAR CHARTS
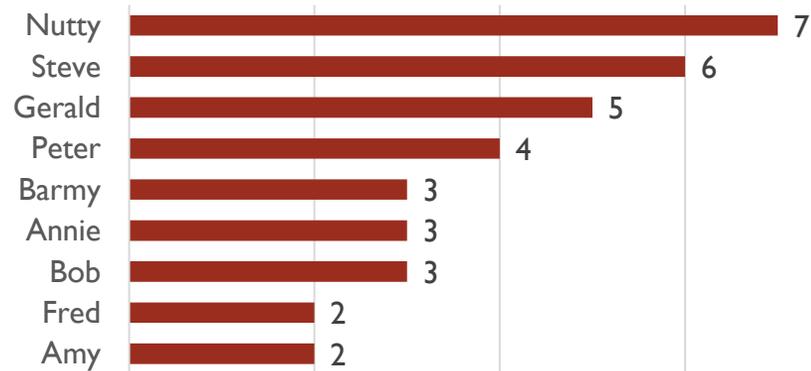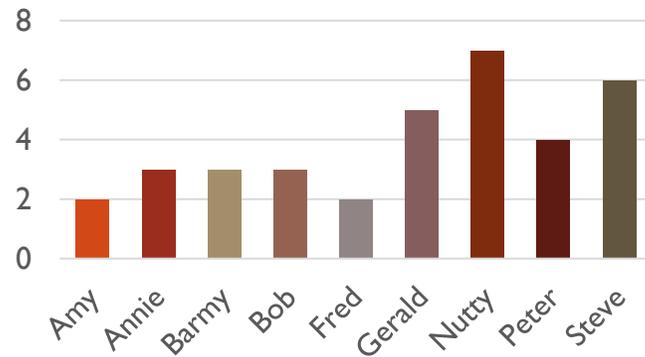
Very versatile and useful.

ALWAYS (?) have a zero baseline.

Use graph axis OR data labels. Axis for broad statements, data labels for more detail.

Horizontal charts are apparently **easier to read** (according to many studies).

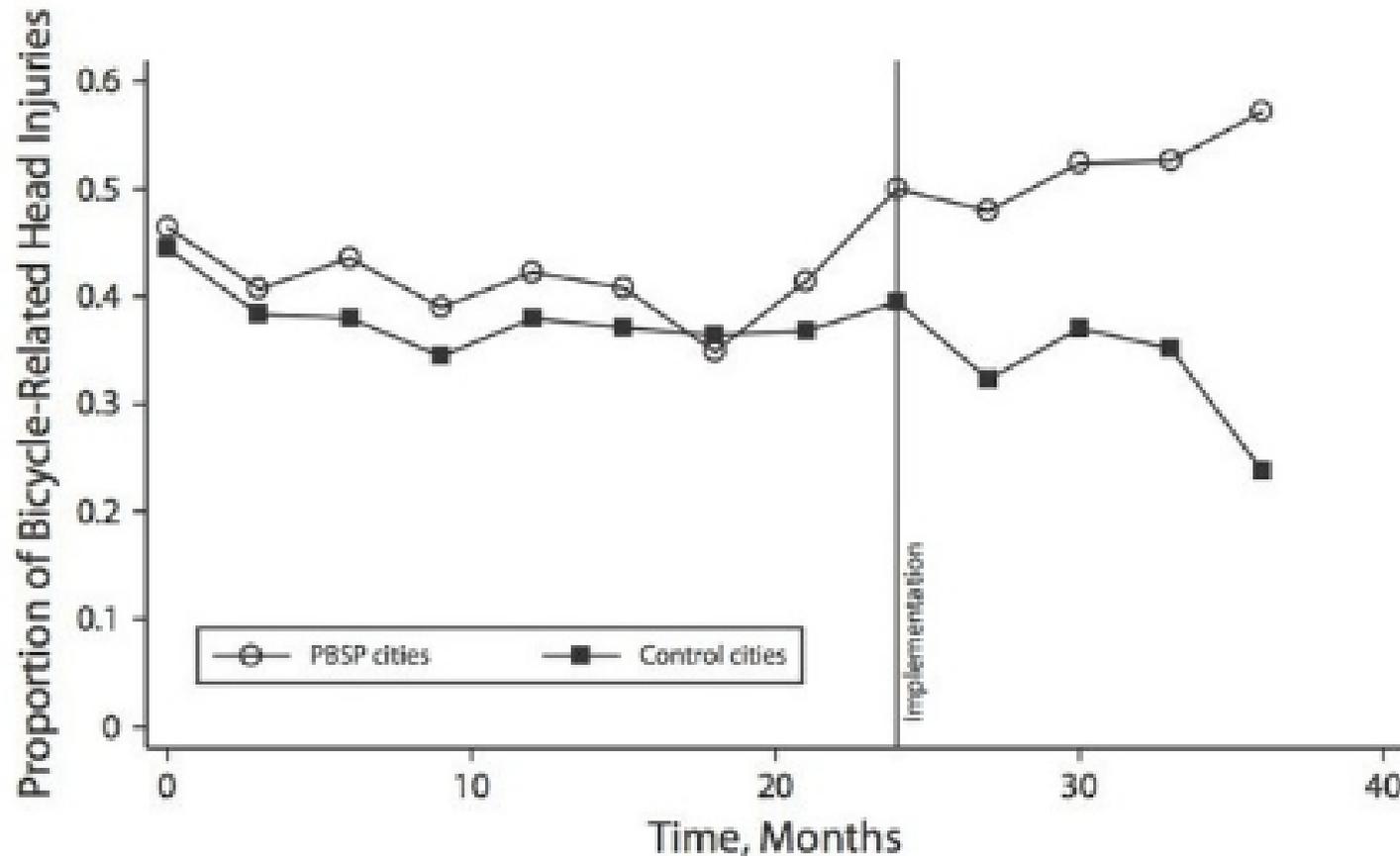Think about the ordering of categories.

STACKED BAR CHARTS

Designed for **comparing totals**, but can quickly become **overwhelming**.

Hard to sort / order.

Filtering is complicated in Power BI (what do you click on & how the chart responds when filter is clicked on?)
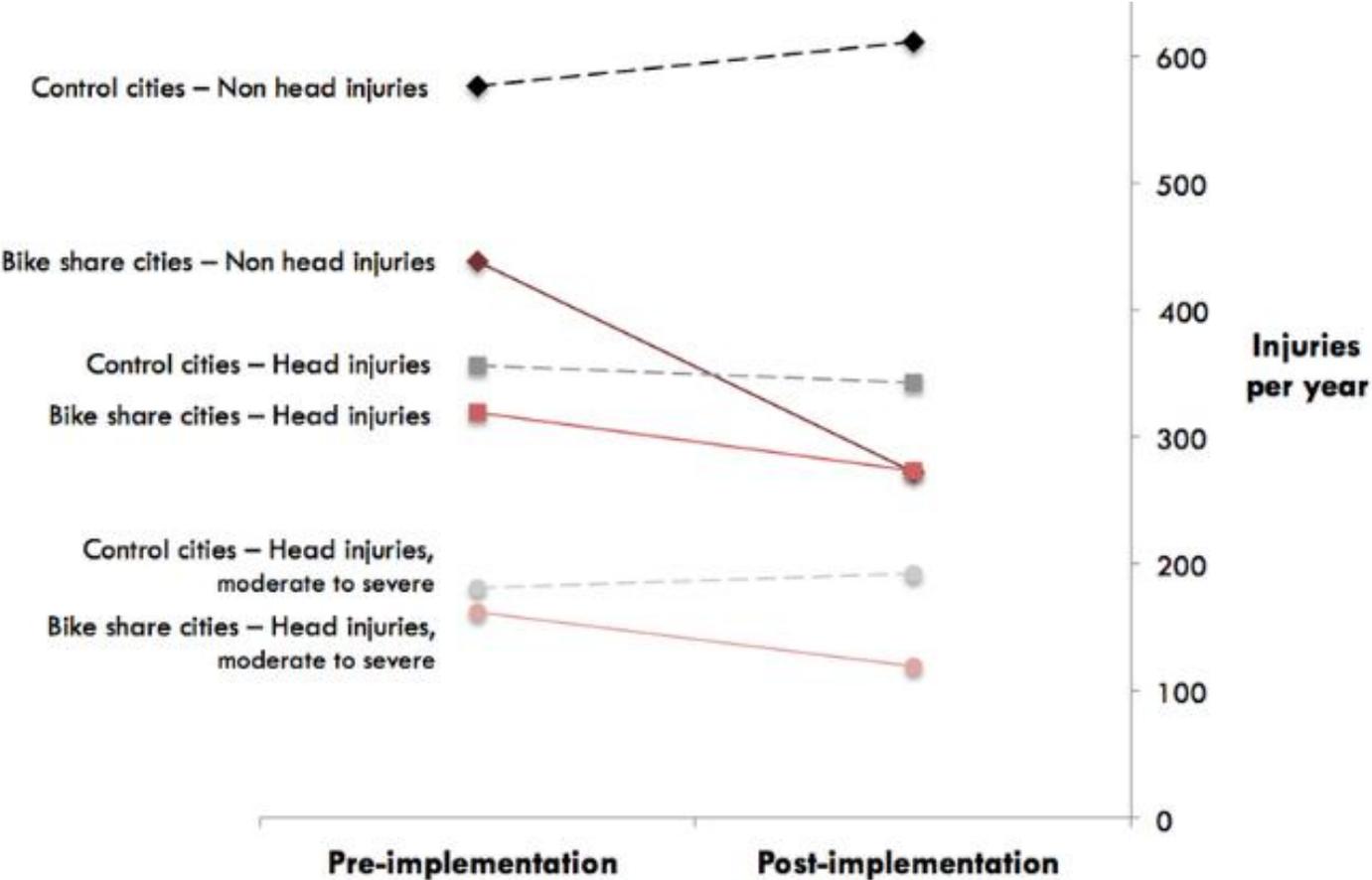
data-action-lab.com

LINE GRAPHS

Proportion of all bicycle-related injuries that were classified as head injuries among cities with public bike share programs and control cities, centered on intervention date (vertical line); North America.
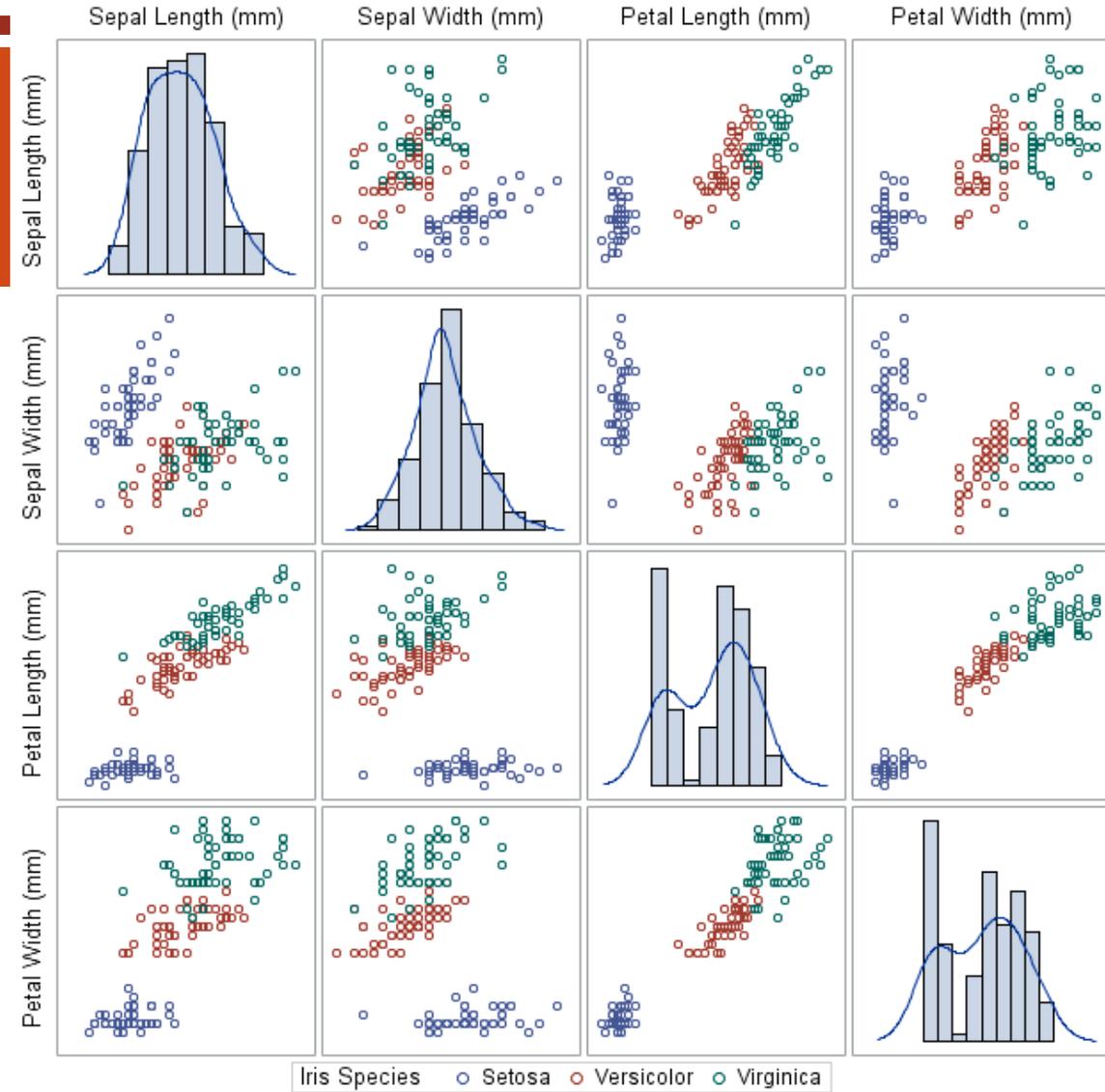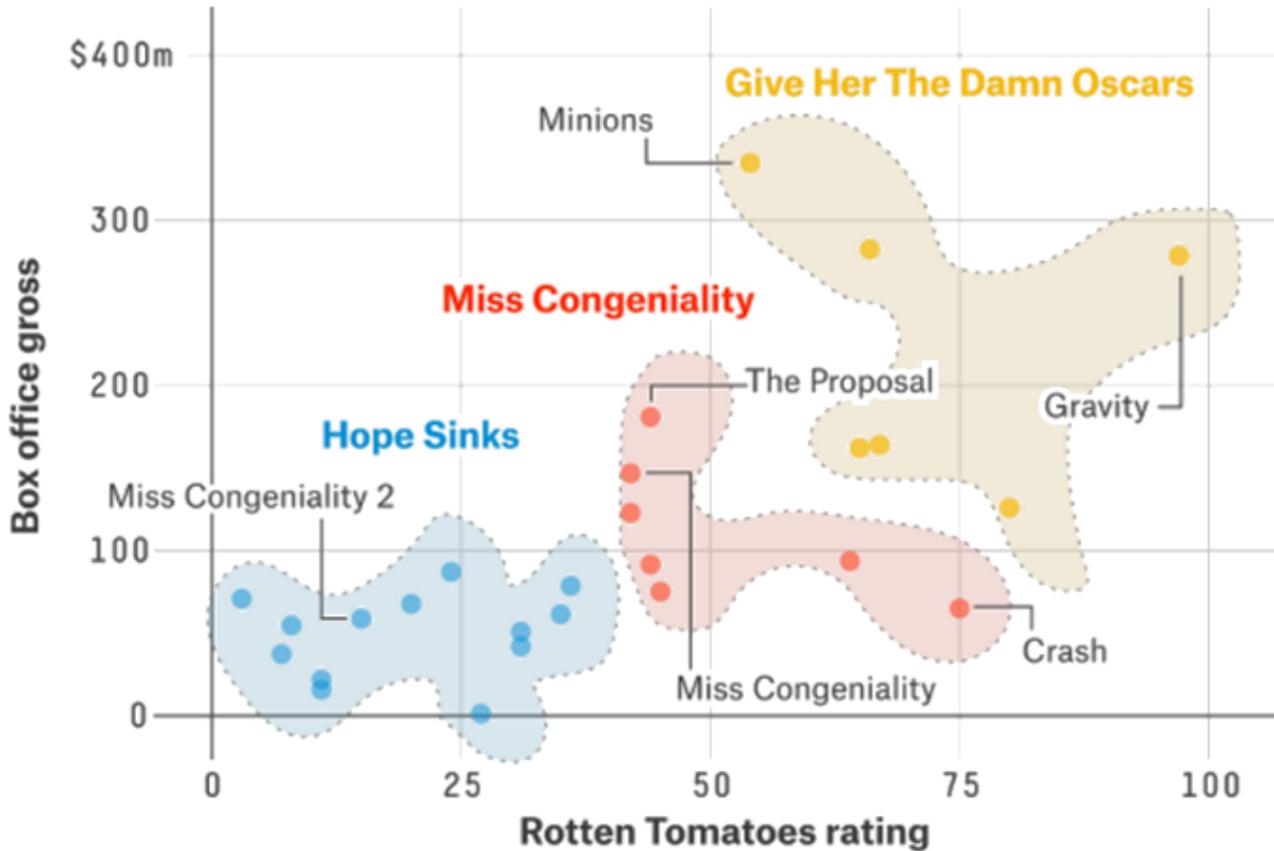
[misleading!]

LINE GRAPHS

Data from new study show declines in all injuries, including head injuries after bike share system implemented.

Because head injuries decline less than other injuries, they are now a larger proportion of all injuries.

SCATTERPLOTS

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