

DATA VISUALIZATION

Aarón José Cabrera Martín
Thaddaus Haase

INDEX

1. History
2. Definition
3. Advantages and Disadvantages
4. Types of Graphics
5. Good Data Visualization
6. JS and Tools

History

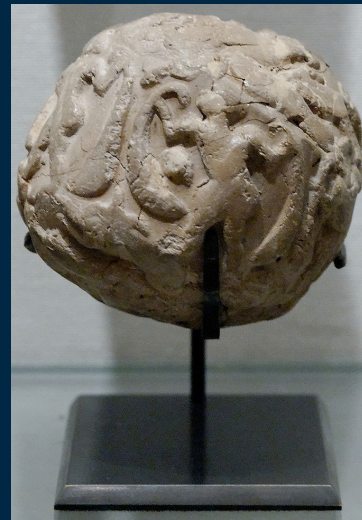
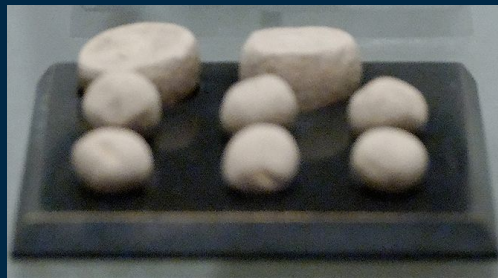
The background is a solid dark blue. It is decorated with various geometric elements: thin white vertical lines of varying lengths, small squares in light blue, orange, and pink, and larger solid squares in light blue and orange. These elements are scattered across the frame, creating a modern, minimalist aesthetic.

Early begin

- Drawing
- Prehistory
- Stars map

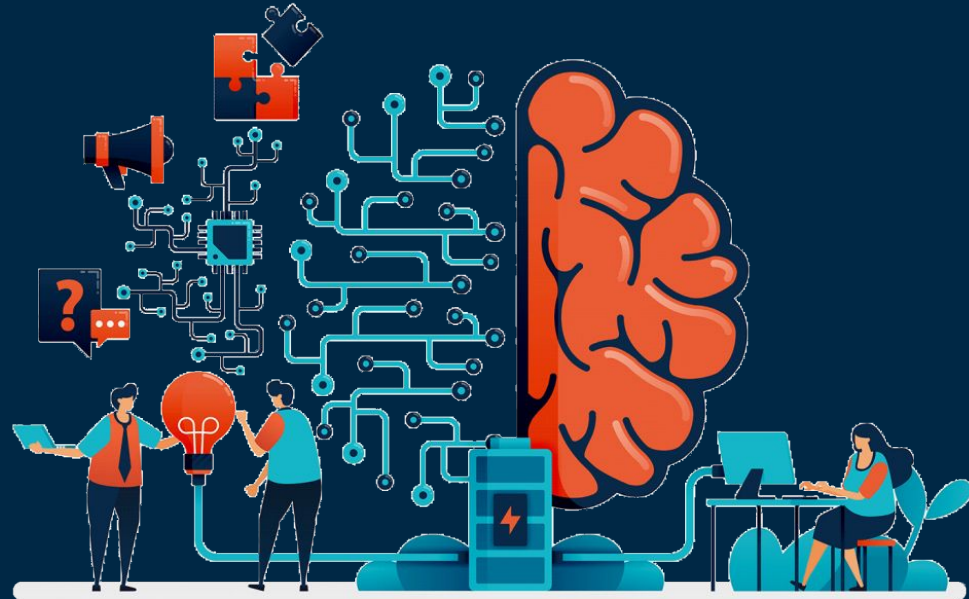
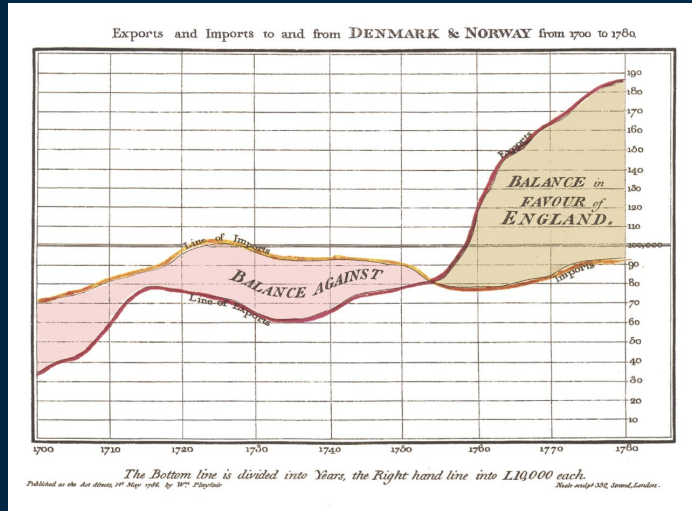


- Physical Artefacts
- Mesopotamia
- Clay tokens



Modern Statistic Charts

- Bar, pie and line chart
- 18th Century
- Big Data
- AI



The background is a dark blue gradient. It features several thin, vertical white lines of varying lengths scattered across the frame. Interspersed among these lines are numerous small squares in three colors: light blue, light orange, and light pink. Some squares are solid, while others are outlined. The overall aesthetic is minimalist and modern.

Definition

Graph or Chart?



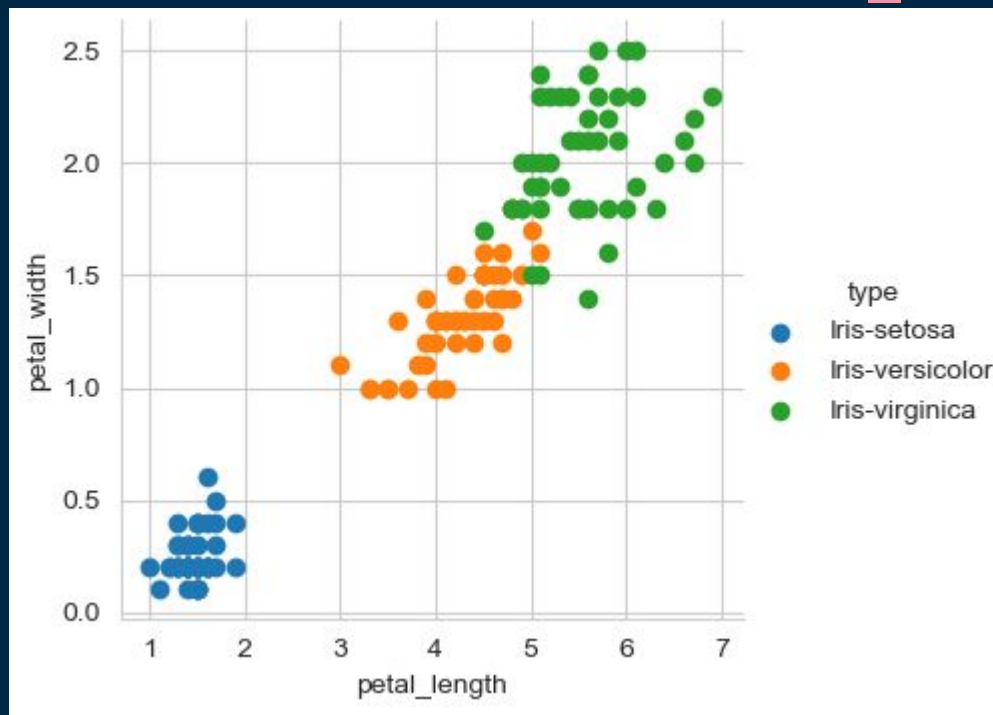
Graphs

VS



Charts

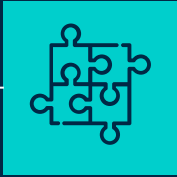
Is Data Visualization Useful?



The background is a dark blue gradient. It is decorated with various geometric elements: small squares in teal, pink, and orange, some of which are solid and others are hollow outlines. Thin white vertical lines of varying lengths are scattered across the frame. The text 'Advantages and disadvantages' is centered in a large, clean, sans-serif font. 'Advantages' is orange, 'and' is white, and 'disadvantages' is white.

Advantages and disadvantages

Advantages



Easier to keep
attention

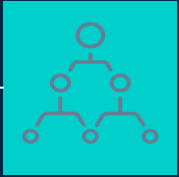


Easier to
learn



Most of the
human perception
is visual

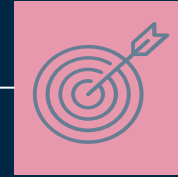
Advantages



Easier to search
patterns and
clustering

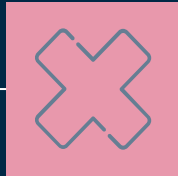


Understanding
the story



Find errors

Disadvantages

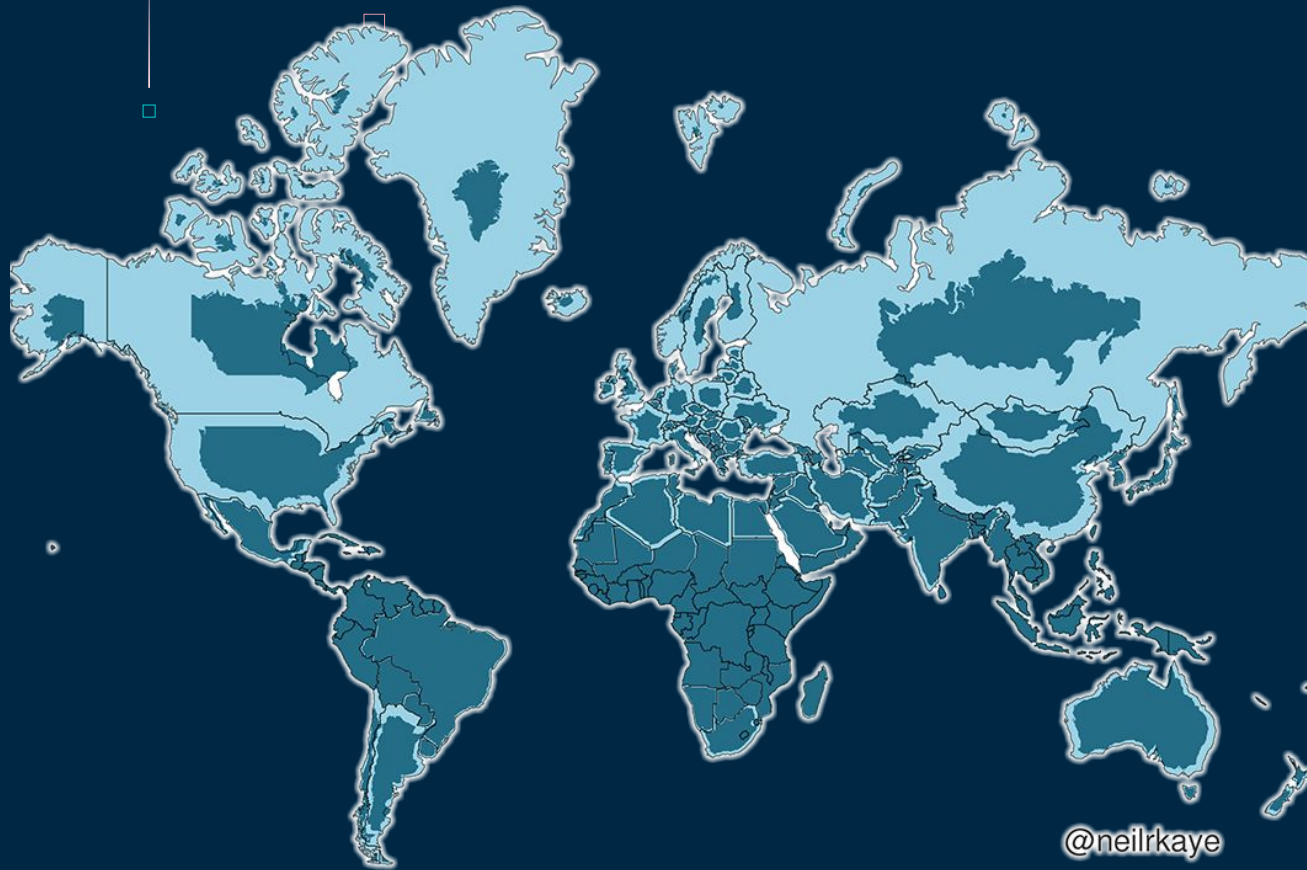


Misinformation

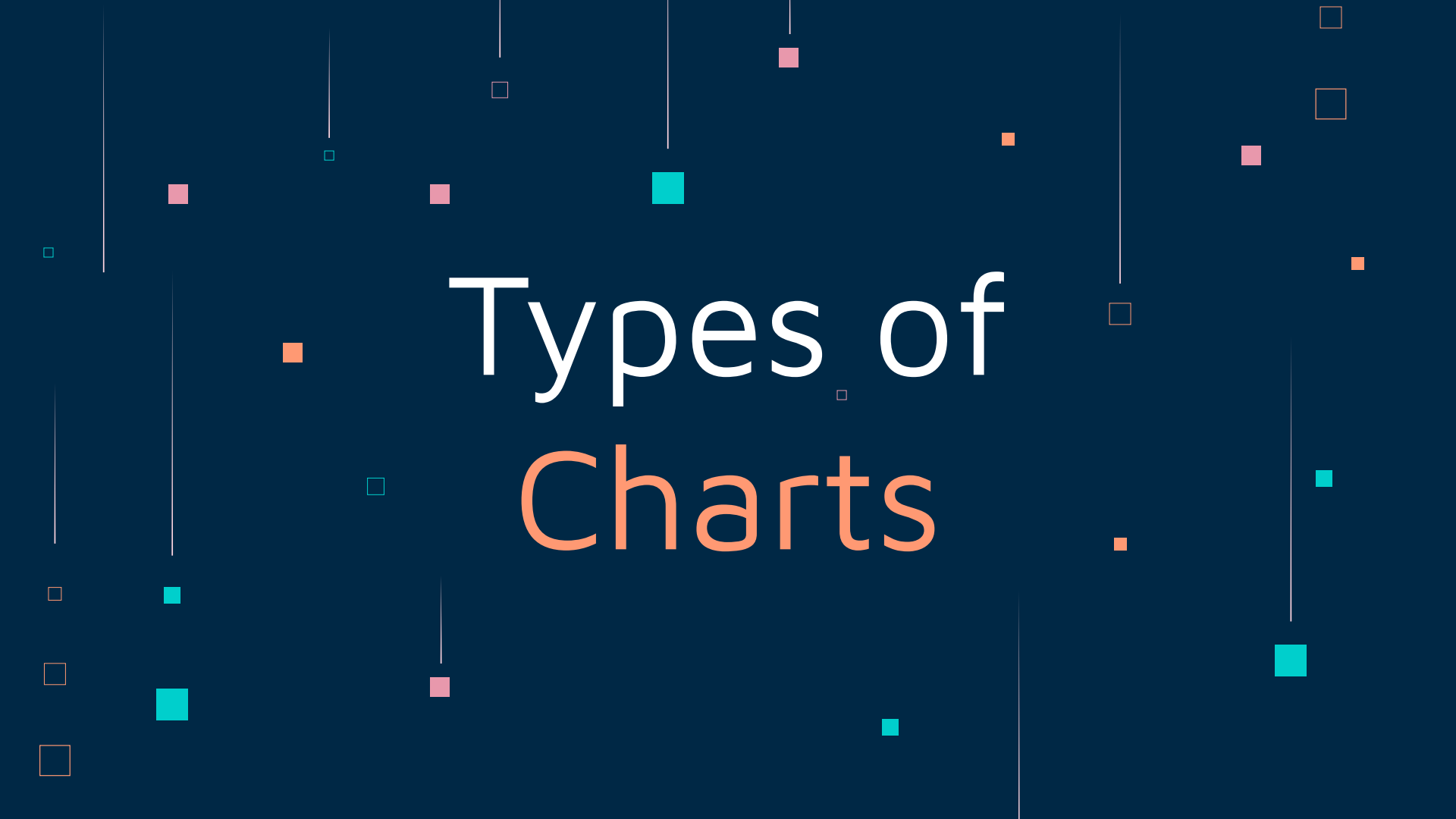


Manipulation

MERCATOR PROJECTION VS THE TRUE SIZE OF COUNTRIES

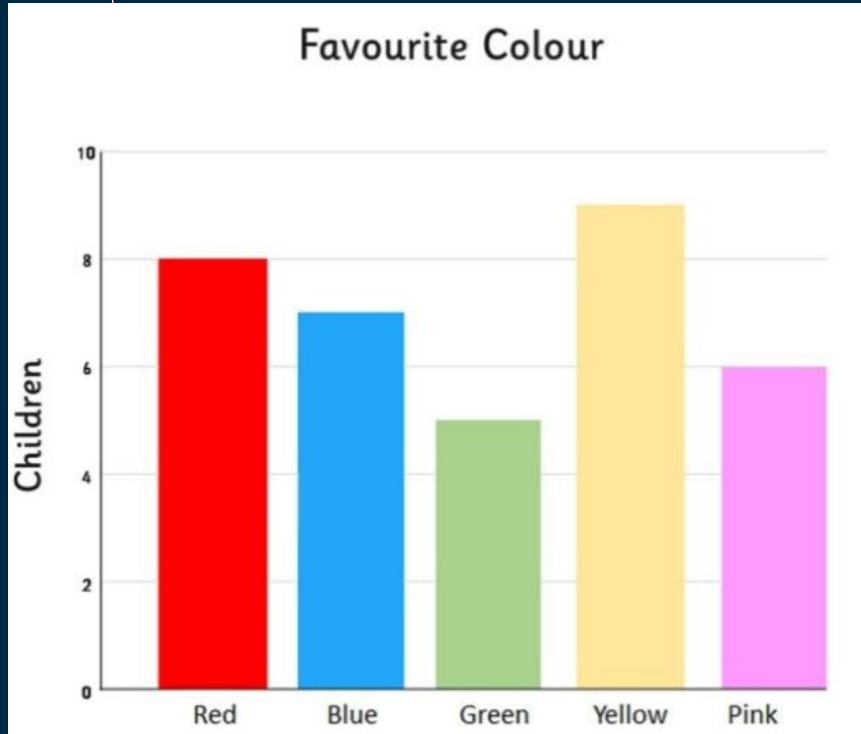


@neilrkaye

The background is a dark blue gradient. It is decorated with various geometric elements: thin white vertical lines of varying lengths, small squares in teal, orange, and pink, and larger squares in teal and orange. The text 'Types of Charts' is centered in the middle of the image.

Types of Charts

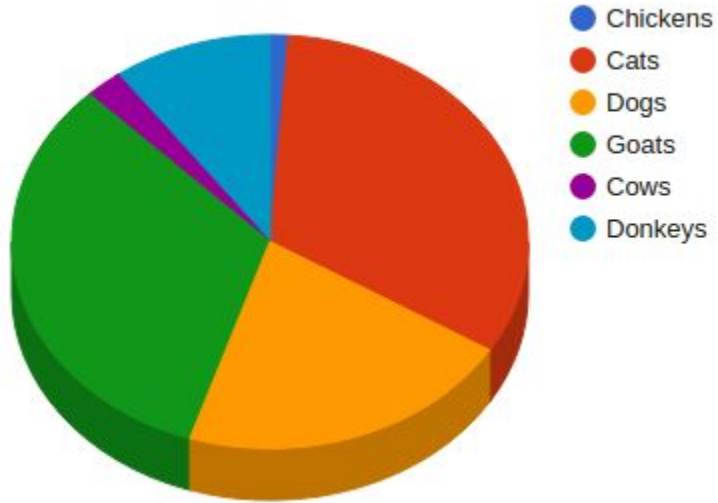
Column Chart



- Proportional Rectangles
- Discrete categories
- Good for comparing

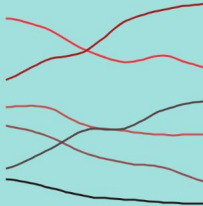
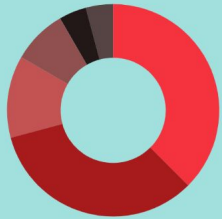
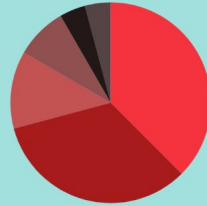
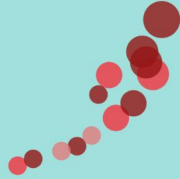
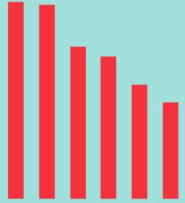
Pie Chart

Animals



- Proportional angle
- Proportional area
- Different colors

Other Charts



- Bubble
- Line
- Heat map
- Scatter Plot

The background is a dark blue gradient. It is decorated with several thin, vertical white lines of varying lengths. Scattered throughout the background are small squares in three colors: teal, pink, and orange. Some squares are solid, while others are outlined. The text 'Good Data Visualization' is centered on the slide. 'Good Data' is in white, and 'Visualization' is in orange. A small orange square is positioned to the left of the word 'Good'.

Good Data Visualization

Color



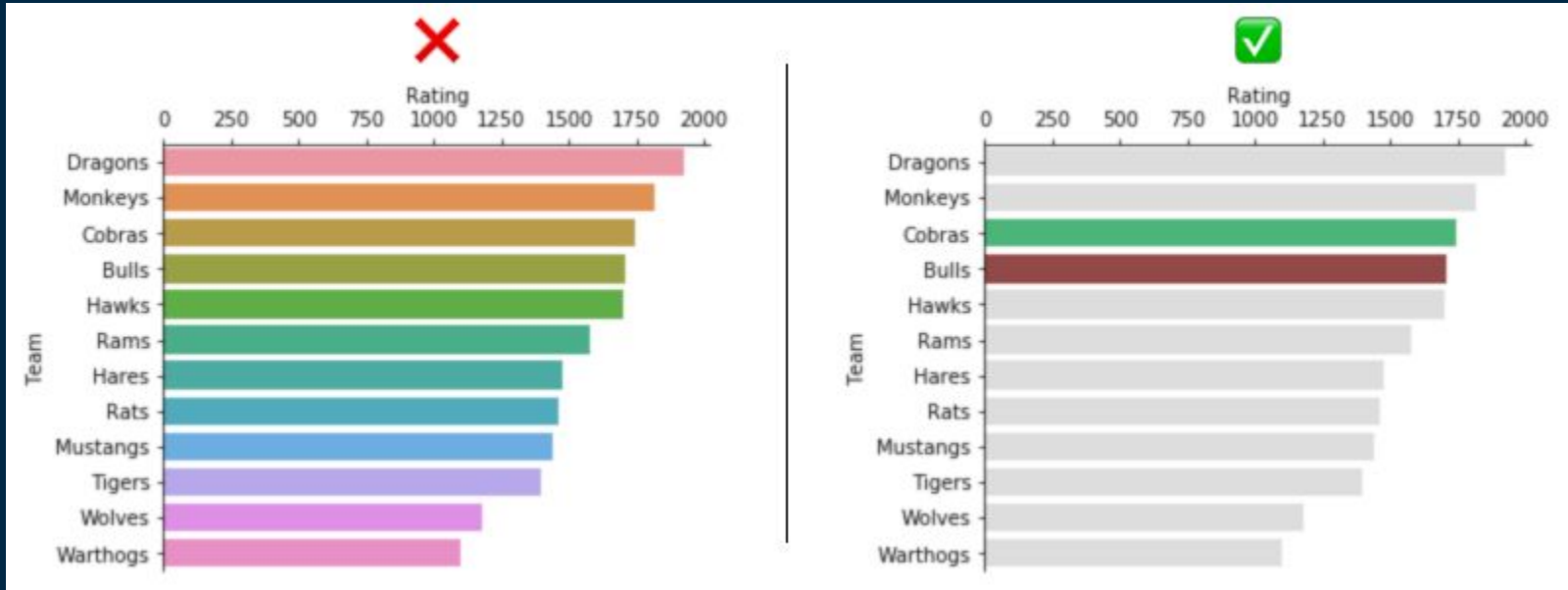
- Use warm colors & blue
- Avoid pure colors
- Make your colors similarly “colorful”
- Control contrast to other colors and background

Color

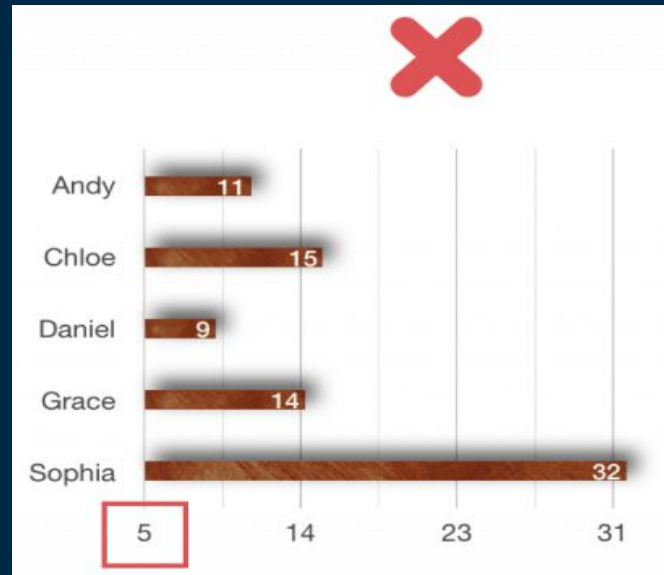
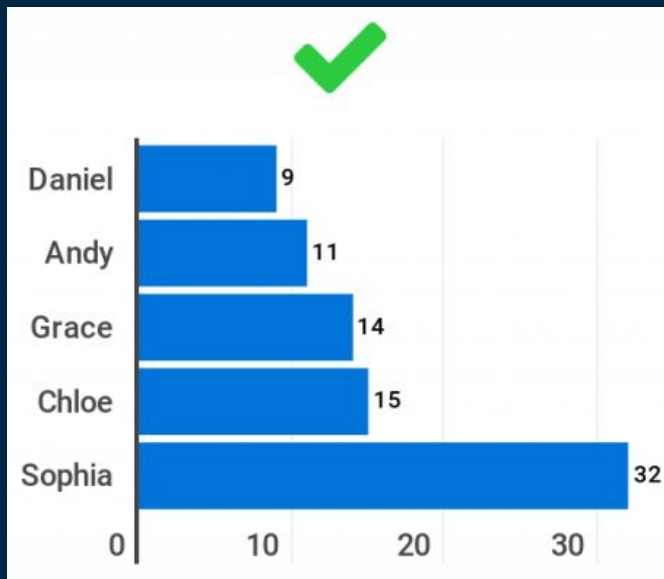


- Make your colors similarly “colorful”
- Choose a background that’s desaturated enough

Keep it simple



Watch details



JavaScript

The background is a dark blue gradient. It is decorated with various geometric elements: small squares in white, orange, and teal, and thin white vertical lines of varying lengths. These elements are scattered across the frame, creating a modern, minimalist aesthetic.

Chart.js

- Easy to use.
- Works on canvas.
- Animation friendly.
- Good Documentation and examples.



The background is a dark blue gradient. It is decorated with various geometric elements: thin white vertical lines of varying lengths, small squares in teal, orange, and pink, and larger squares in teal and orange. The text 'Other Tools' is centered in the middle of the image.

Other Tools

d3.js

- Powerful tool.
- Good for animations.
- Can change CSS.
- Incompatible with ES6.



The background is a dark blue field decorated with a pattern of small squares and thin vertical lines. The squares are in three colors: light blue, orange, and pink. Some squares are solid, while others are hollow. The vertical lines are thin and white, extending from the top edge of the frame. The text 'Let's Talk Business' is centered in the middle of the image.

Let's Talk Business

Data visualization in businesses



- Decision Making
- Summarise large amounts of data
- visualize growth to discover trends
- Reveal unnoticed opportunities

Tableau

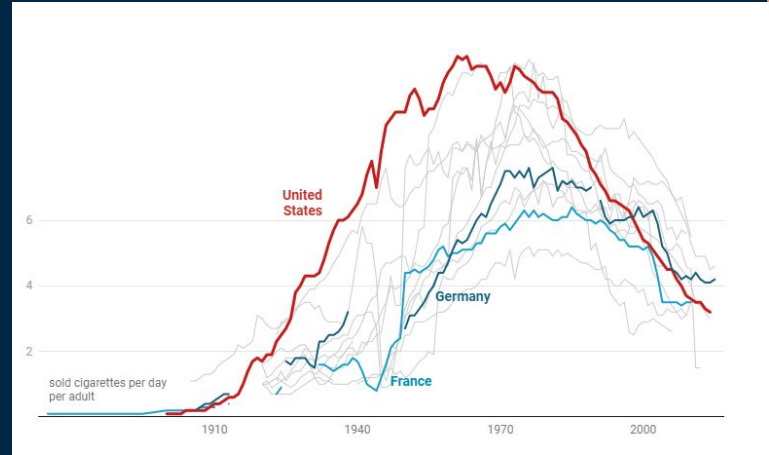
- Online, desktop and mobile tool.
- Business oriented.
- “Best Business Intelligence Solution”



Datawrapper

- Powerful online tool.
- Chart, maps and tables.
- No programming.
- JS api.

Datawrapper



Do you have any questions?

THANKS



thaddaus.haase.32@ull.edu.es



aaron.jose.cabrera.martin.13@ull.edu.es

Bibliography

- Data Visualization History
- Chart History
- Definition
- Graph or Chart
- Advantages
- Choose Colors
- Colors Combination

Bibliography

- Chart.js
- D3.js
- Tableau
- Datawrapper
- Slides Theme

