

## WHY IS DATA VISUALIZATION SO POWERFUL?

The amount of data coming our way is growing exponentially. In 2021 alone, it is estimated that humankind [generated 74 zettabytes of data](#) – that’s about 10,000 GB per person. How on earth are we going to keep this manageable?

### Visualization: our most powerful tool

Visualization is one of the key solutions to cope with the endless stream of data, content and information – together with other strategies such as filtering and organization. Visualization might very well be the most powerful tool we have to turn complex information into manageable insights. But why is that?

There are three important reasons why data visualization is a very strong way to present information:

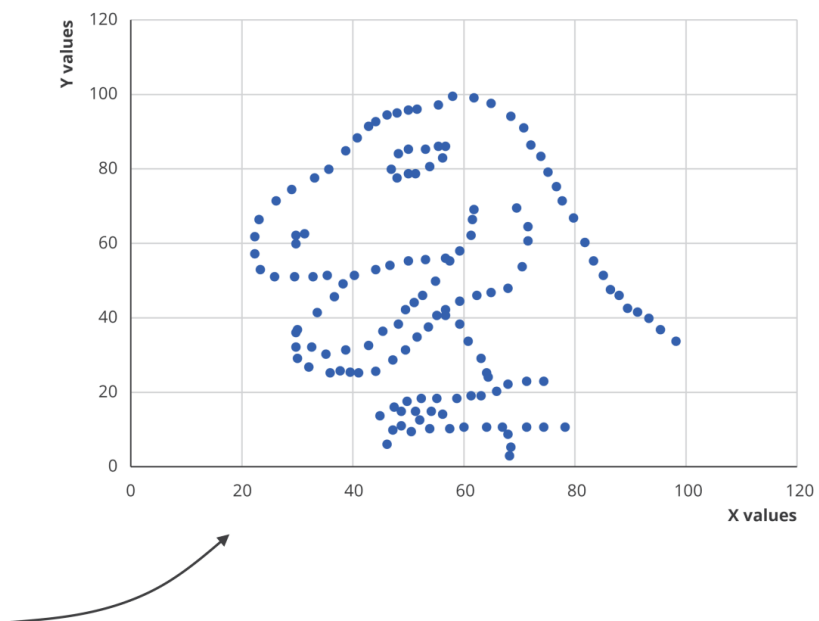
1. its information density is extremely high,
2. it attracts the attention of your audience, and
3. visual information is easier to process and memorize.

### Reason 1: information density

Researchers at MIT have shown that we can detect the meaning of a picture in [as little as 13 milliseconds](#) - that’s extremely fast.

We could spend hours looking at this dataset for example, created by visual journalism professor [Alberto Cairo](#), without learning anything. But as soon as we turn the data into a scatter plot, it’s obvious that we’re looking at a dinosaur. In the blink of an eye!

X	Y
55.3846	97.1795
51.5385	96.0256
46.1538	94.4872
42.8205	91.4103
40.7692	88.3333
38.7179	84.8718
35.6410	79.8718
33.0769	77.5641
28.9744	74.4872
26.1538	71.4103
23.0769	66.4103
22.3077	61.7949
22.3077	57.1795
23.3333	52.9487
25.8974	51.0256
29.4872	51.0256
32.8205	51.0256
35.3846	51.4103



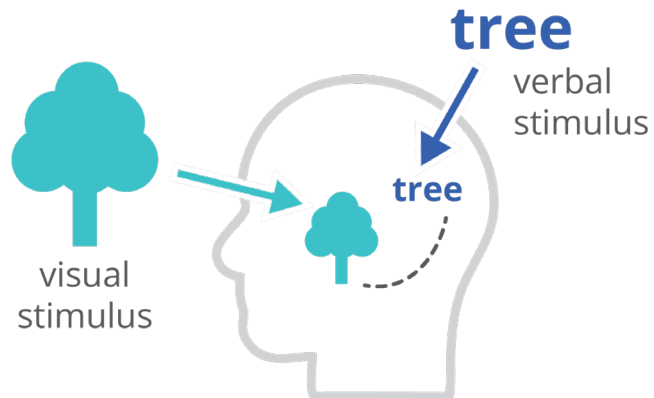
## Reason 2: attractiveness

Visual information is also attractive. Not in the sense that it is beautiful to look at (although that's often also our goal), but literally: it attracts the attention of your audience. In a book or newspaper, people will often look for the pictures first, before they start reading all of the text.

## Reason 3: easier to process

Finally, charts and infographics are easier to process than written text.

The [dual-coding theory](#), developed by Allan Paivio, states that our brains process information both in a visual, as well as a verbal way. If we only get verbal stimuli, only a part of our brain is working. That's why during a long phone call we automatically start doodling - the visual brain is bored and looking for things to do. By providing our audience with a combination of text and images, the entire brain is stimulated, leading to better focus, better understanding, and better memorization.



## Harnessing the power of data visualization

So in summary, data visualization is powerful because it combines a high information density, attractiveness, and easier processing and memorization.

If you want to know more about visualizing data in the right way, you can check out the other videos in this series. Or I invite you to read my book, [Powerful Charts](#), that will give you actionable insights and practical guidelines to create data visuals that truly engage and inspire your audience.