

DATASCIENCE, LEARNING AND APPLICATIONS

DALAS - Storytelling

10 février 2024

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DEFINITION

Storytelling

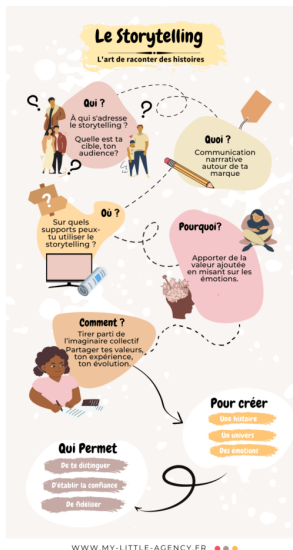
Storytelling

Storytelling is the art to tell a story to reach an audience.



Figure 1 – (c) Be a Boss

Storytelling

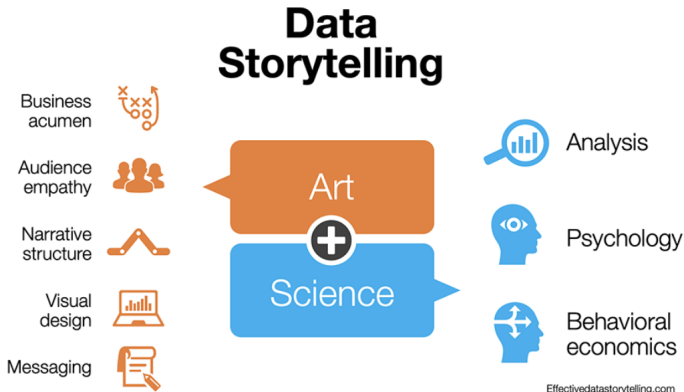


Data Storytelling

<https://datasciencedojo.com/blog/data-storytelling-in-action/>

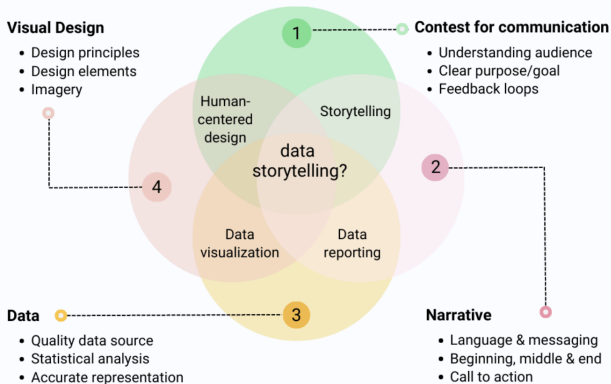
"Data storytelling is the process of using data to communicate the story behind the numbers - and it's a process that's becoming more and more relevant as more people learn how to use data to make decisions. In the simplest terms, data storytelling is the process of using numerical data to tell a story. A good data story allows a business to dive deeper into the numbers and delve into the context that led to those numbers."

Data Storytelling



Data Storytelling

What is data storytelling?



The components [\(https://www.effective-datascience.com/\)](https://www.effective-datascience.com/)

■ Data

- The foundation of every data story.
- When you analyze data and uncover a key insight, a data story helps you explain the meaning and significance of the insight to other people.

■ Narrative

- The structure of your data story.
- Not merely about the words or context, but how you organize the information into a meaningful and engaging storyline.
- You need to string together multiple data points or charts to tell your story.
- What helps you decide what information to share and in what order.

■ Visuals

- The scenes of your data story.
- When the data is complex, visualizing it in data charts helps the audience to see things (anomalies, patterns, and trends).
- Effective use of data visualizations, diagrams, and images can enlighten your audience's minds to new perspectives.

Why Data Storytelling?

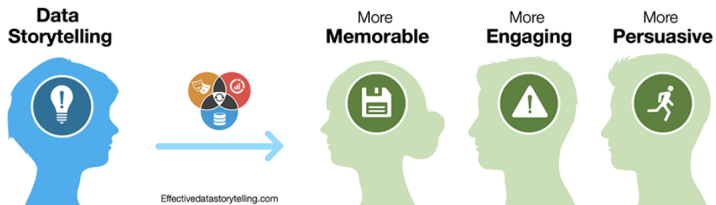


Figure 3 – (c) <https://www.effectivedatastorytelling.com/>

Data Storytelling - the How ?

6 Steps to Tell Stories with Data



1. Understand the Context

Know your Who-What-How and the Big Idea



2. Choose an Effective Visual

Use the best type of visual(s) for your data and message



3. Identify & Remove Clutter

Apply the Gestalt Principles, alignment, white spaces, contrast and visual order



4. Direct the Audience's Focus

Guide people's attention with preattentive attributes (size, color, position, texts)



5. Think like a Designer

Achieve your goals with great design (affordance, accessibility, aesthetics, acceptance)



6. Tell a Story

Use the proven 3-part narrative to tell a story with your data

Figure 4 – (c) Reading Graphics

What is not Data Storytelling? (<https://www.effectiveadatastorytelling.com/>)

■ Not a descriptive commentary.

- Not a simply commentary that accompanies charts that describes the information being displayed.
- Data storytelling extends well beyond just describing data (the what) and delves into the why to enlighten people's minds.
- While calling out unusual anomalies, patterns, or trends in the data may be interesting, you have an incomplete data story if you can't explain why they occurred. ?

■ Simply added context.

- Context is essential in data storytelling as it can provide greater clarity into what's happening. Having more background information is a step up from simply describing the data.
- Merely providing more context does not mean you have created a data story.
- Stories follow a narrative arc or structure where events are revealed in a specific sequence. Without a clear storyline, you don't have a data story even with rich amounts of context. ?

What is not Data Storytelling? (<https://www.effectiveadatastorytelling.com/>)

- **Data charts don't tell a story if not intended for that purpose.**
 - While some graphs may contain some interesting data and yield part of a data story, a single chart can rarely fully explain 'the why' behind an entire problem or opportunity.
 - You need multiple charts to dig into an issue and properly explain it.
 - Many charts are designed to aid in the exploration of the data, not the explanation of the data.
- **Data visualization (in general) is not enough.**
 - Data storytelling is not a synonym for data visualization.
 - Visualization is only one aspect of a data story.
 - While data stories can actually exist without visuals (e.g., an audio data story featured in a podcast), data storytelling cannot happen without narrative.

What is not Data Storytelling? (<https://www.effectivedatastorytelling.com/>)

■ **Dashboards do not tell data stories.**

- Dashboards are primarily designed to help us monitor business performance and explore data sets.
- While dashboards can be useful in helping us identify potential insights, they can be equally cumbersome and insufficient for curating and telling focused, persuasive data stories.
- While many analytics platforms offer some automated storytelling capabilities, this technology is limited to only describing anomalies in the data, not explaining what caused them.

Let's learn by the practice

We are going to brainstorm together on the different steps of data storytelling.

Examples will not be available online. Take notes !