



Facts

Structure

Process

Data storytelling is not about telling fairy tales. It's

- **More** than a visualization or presentation of data.
- **A** structured form (tool) of data communication.
- **Getting** one key message across.
- It's the red thread within the data analysis. Numbers are put into context.
- **Communicating** the results in an understandable language to motivate the stakeholder to act (i.e. make decisions).

Why apply storytelling to your data project?

- Our brain prefers stories over plain data.
- Stories trigger our emotional response and foster understanding for complex topics.
- The brain can better process and remember figures if packed within a story.

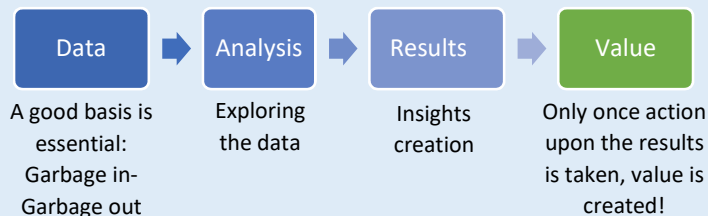
When are data stories recommended?

- Data insights are complex, disruptive and non-intuitive.

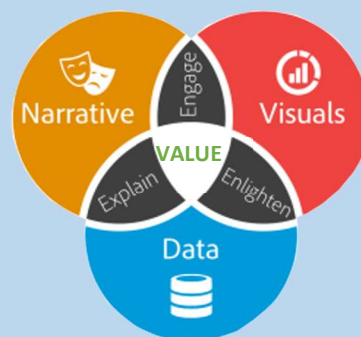
How does it work?



Data insights are turned into action = stakeholders make decisions.



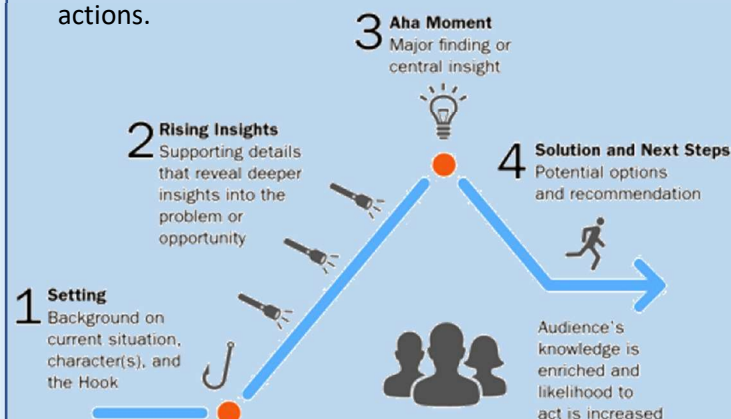
Data storytelling translates data into value.



(Dykes, 2016)

Create non-misleading, well-labelled and simple **visuals** around your story.

Create the **data journey** in a linear sequence of actions.



(Dykes, 2019)



Understand the business need. What should change after finalizing the project? Write it down as accurate as possible.



Get to know your stakeholders.*



Analyse the data and choose the most relevant key message from your generated insights.



Create your target-oriented story around this key message. Keep in mind the narrative structure.



Be aware that your story is subjective. Don't show your perspective but what the stakeholder needs.



Remind yourself of your goal. Read your notes. What should your analysis trigger.



Support your story message with a simple (!) visualization. Keep in mind good labelling, adding e.g. legends, a glossary and annotations.



Ask yourself questions.*



Collect feedback from colleagues and stakeholders.



Stay inspired and up-to-date to constantly improve yourself.*

*see details on the next page

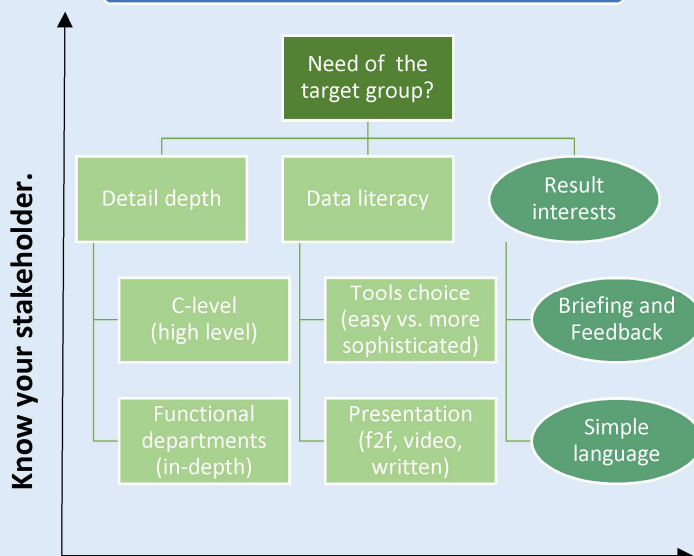


The Data Storytelling Cheat Sheet

June 2022 | V1

<https://github.com/loberascher/Data-storytelling-cheat-sheet>

Parties



The “Art & Science” mind of a data storyteller.

Data understanding • IT skills (Analytical skills)
Methodical know-how • Business understanding
Strategic management • Project management
Scientific disciplines (behavioural economics, learning theory, decision theory,...)

Creative • Curious • Resilient • Patient
Teamplayer • Focused • Critical thinker
Communicative • Rhetorically skilled • Self-confident • Visual thinker

Supportive, open-minded company culture.

Checklist

- Does my story answer the **business question**?
- Do I **know my stakeholders** to satisfy their business needs and data interests?
- Are the results understandable, target-oriented and circle around **one key message**?
- Does my story trigger a **call to action**?
- Is the communication **language simple** (e.g. no technical explanations)?
- Does the data story follow a **linear sequence**?
- Are the numbers put into **context** (e.g. high/low values are good/bad)?
- Are the **visualizations simple** and familiar?
- Do the graphics contain enough **annotations, comments**, etc. so that the visuals speak for themselves?
- Is the analysis process **transparent** and are the **data sources** shown?

Remember the 5 W's.

- **Who** are your stakeholders?
- **What** happened (results)?
- **Why** did it happen (background information, explanation)?
- **When** did it happen (linear sequence)?
- **Where** did you retrieve your data from?

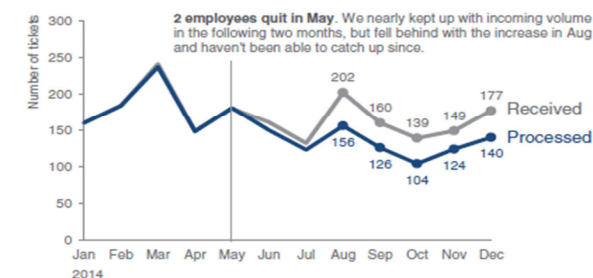
Get inspired

Data story example.

Please approve the hire of 2 FTEs

to backfill those who quit in the past year

Ticket volume over time



Data source: XYZ Dashboard, as of 12/31/2014 | A detailed analysis on tickets processed per person and time to resolve issues was undertaken to inform this request and can be provided if needed. (Knaflig, 2015)

Inspiration.

Websites.

- * informationisbeautiful.net
- * chartr.co

Podcasts.

- * storytellingwithdata.com

Related fields.

- * Data journalism. Eg. nytimes.com “theUpshot”.

Community.

- * datastudio.google.com
- * public.tableau.com

Books.

- * Storytelling with data (Knaflig, 2015)
- * The data storytelling workbook. (Feigenbaum, A., & Alamalhodaiei, A. 2020)

