

The importance of stories

DATA STORYTELLING CASE STUDY: GREEN BUSINESSES



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What to expect

- You will review important concepts
- You will practice relevant skills
- You will be inspired to embark in your own projects



Recommended courses

- Introduction to Data Literacy
- Data Storytelling Concepts
- Communicating Data Insights

What is a story?

A connected series of events told through:

- words (written or spoken)
- imagery (still and moving)
- body language, performance, music
- any other form of communication

¹ <https://literaryterms.net/story/>

What is storytelling?

The activity (or art?) of telling stories. It involves elements like:

- Message
- Senses
- Connection
- Emotion



Data storytelling?

"The concept of building a compelling narrative based on complex data and analytics that help tell your story and influence and inform a particular audience." - Microsoft



¹ <https://powerbi.microsoft.com/en-us/data-storytelling/>

Why should you care?

A story is worth a thousand images

- It can draw your audience into a situation they can empathize with
- It can convey emotions, values, and insights
- It can resonate with them long after the story is over

Let's practice!

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Planning for success

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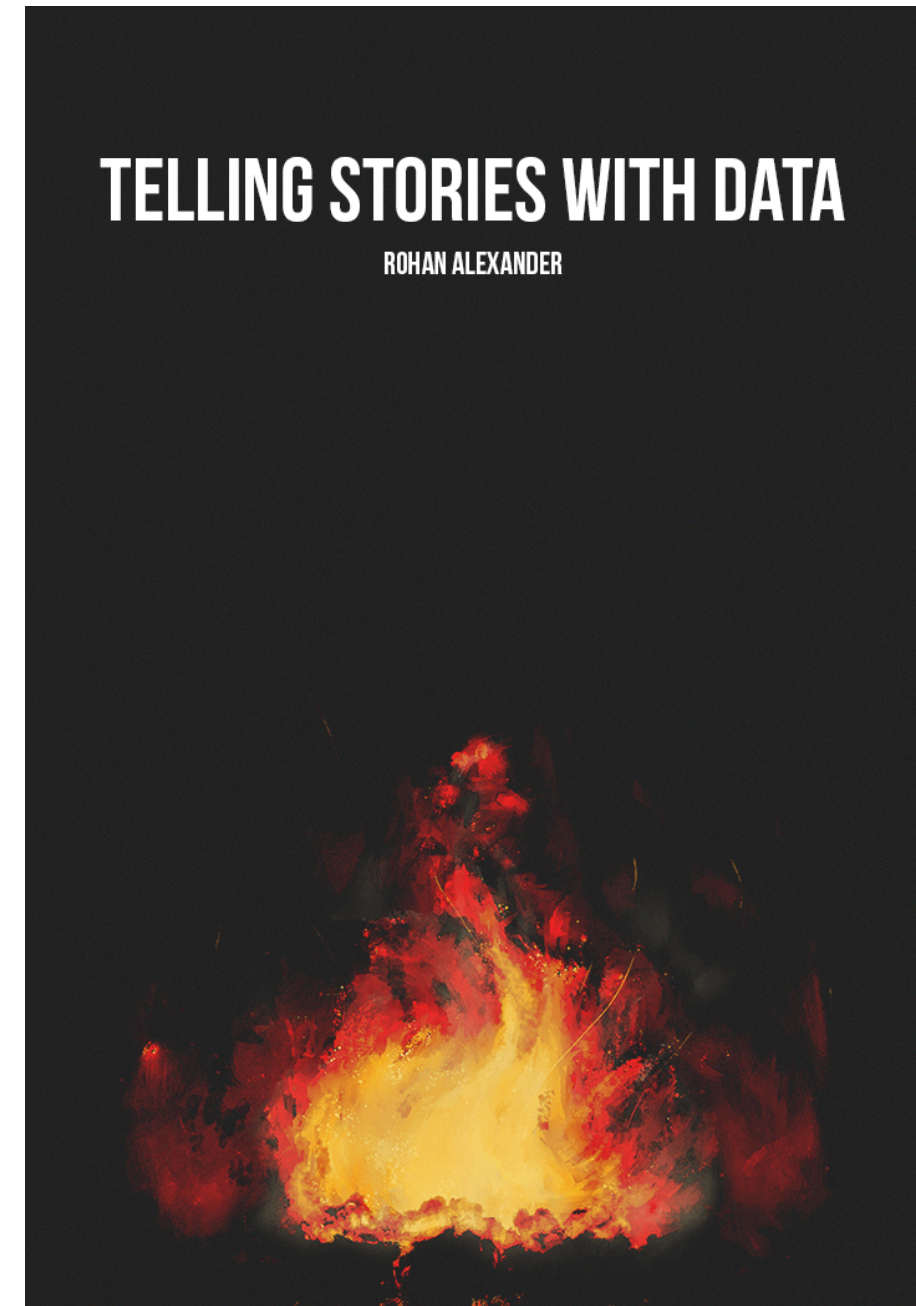


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A sample workflow

1. **Plan** and sketch an endpoint
2. **Simulate** and consider the simulated data
3. **Acquire** and prepare the actual data
4. **Explore** and understand the actual data
5. **Share** what was done and what was found



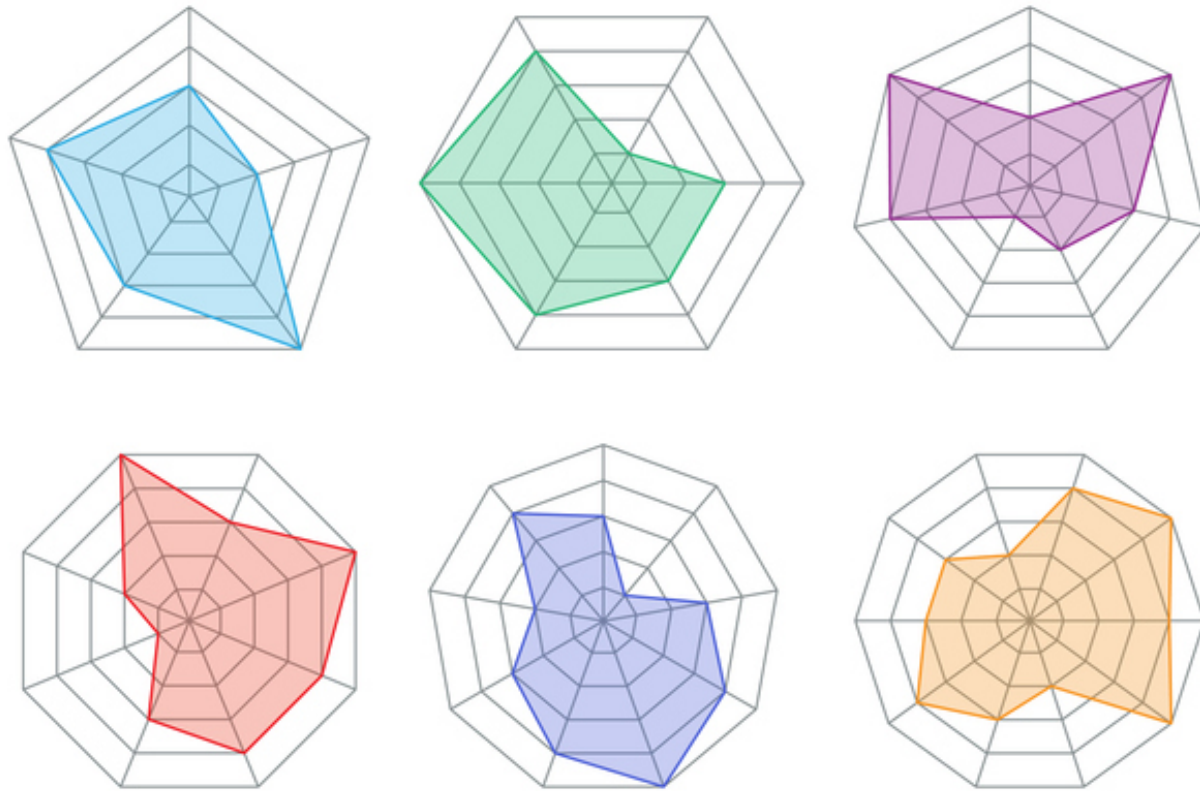
¹ <https://tellingstorieswithdata.com>

1. Plan and sketch an endpoint

- Experimenting can be very useful
- We cannot walk aimlessly for long
- Forces you to focus and consider what you want as a result



2. Simulate and consider the simulated data



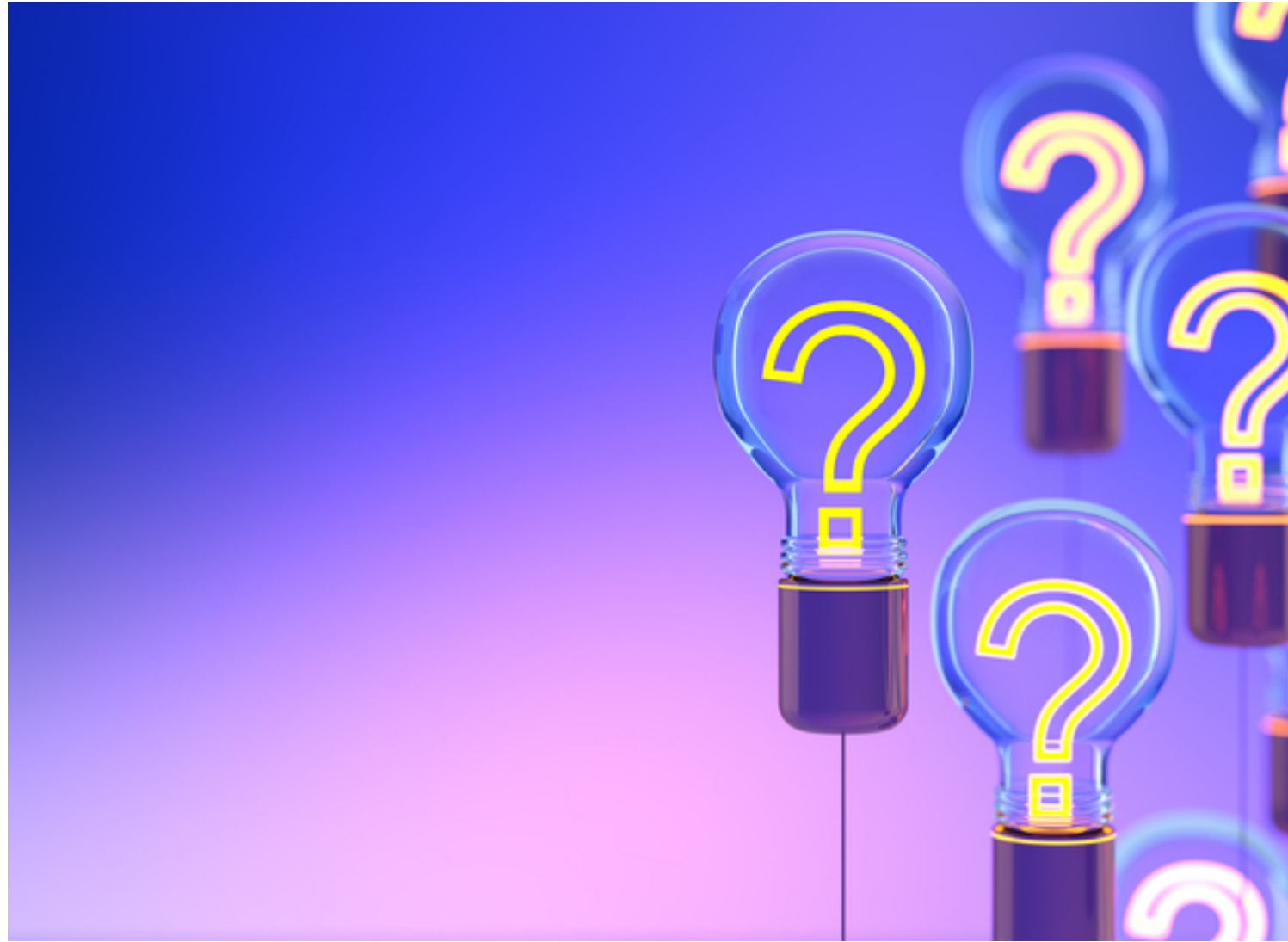
- Look into the details of the data storytelling product
- You will realize errors in the data visualization and statistical models
- It is cheaper to realize you made a mistake on simulated data

3. Acquiring and preparing the data

- One of the most important and often difficult stages
- There may be too little of it...
- Or too much of it
- **Tip 1:** Take your time in this step
- **Tip 2:** It will get easier over time



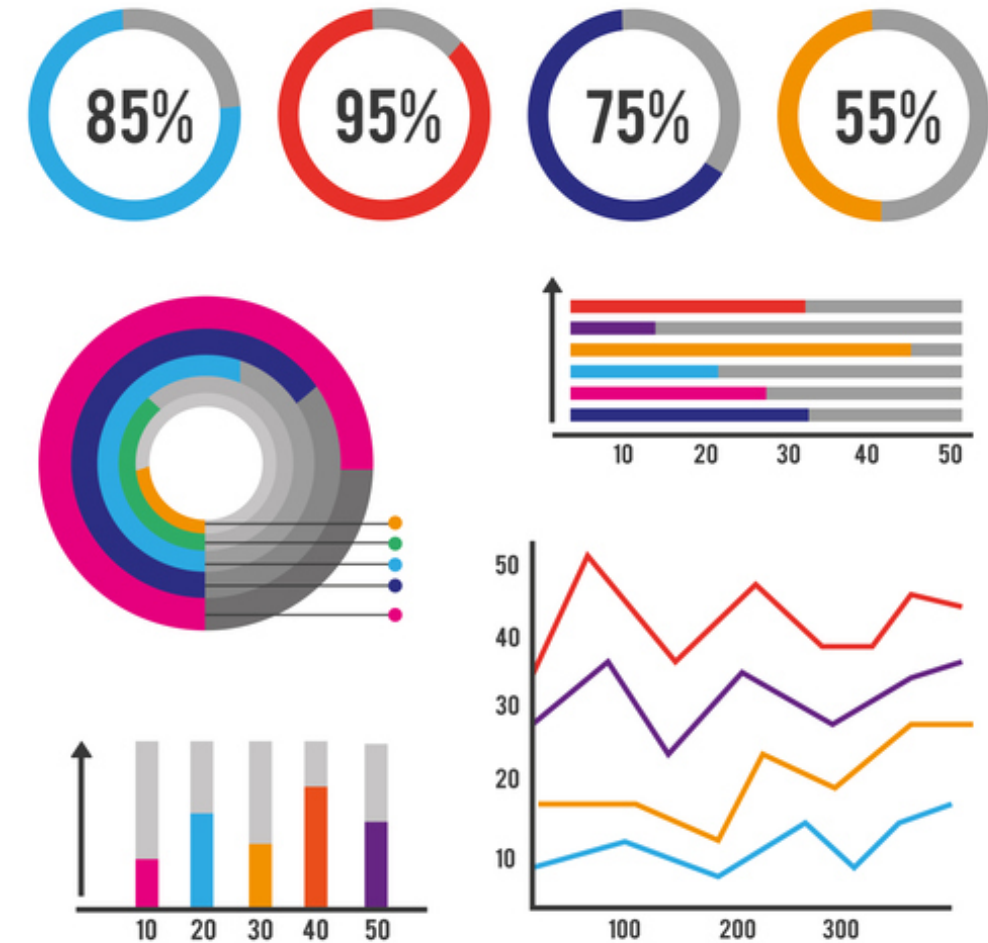
4. Explore and understand



- Get to know your data
- Identify relationships
- Calculate descriptive statistics
- Perform statistical models

5. Share what was done and what you found

- Statistics + Visualization + Narrative
- What decisions did you make?
- Why you made them?
- What did you learn?



Let's practice!

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Green businesses in Colombia

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What is a green business?

According to Colombia's Ministry of the Environment and Sustainable Development:

- Provide eco-friendly goods or services
- Aim to reduce greenhouse gases.
- Incorporate sustainable practices or promote
- Or promote positive social and environmental impacts
- They can be verified when they meet certain criteria

¹ <https://www.minambiente.gov.co/wp-content/uploads/2022/11/Actualizacion-Plan-Nacional-Negocios-verdes-2022-2030.pdf>

What do we know about them?

Our data comes from the open data website datos.gov.co.

Variable	Description
year	Year of verification
environment_authority	Environmental authority that verified them
region	Region of where the business is located
department	Department of where the business is located
municipality	Municipality where the business is located
category	Classification of it's economic activity
sector	More specific classification of its economic activity
result	Level of compliance with the verification criteria

¹ <https://www.datos.gov.co/Ambiente-y-Desarrollo-Sostenible/Lista-de-Negocios-Verdes-y-Sostenibles/rggv-qcwf>

Identify a question

- **Clarity:**
 - Is it clear, specific and unambiguous?
- **Relevance**
 - Does it address your audience's needs?
- **Actionability**
 - Does it lead to insights that can be acted upon?



Our example exercise

You work for a policymaker who:

- wants to understand the green business ecosystem
- wants to encourage the creating of those businesses
- wants to achieve the countries environmental goals

Question

Where are the green businesses located in Colombia?

Let's practice!

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