

BREATHE LIFE INTO PACIFIC DATA



**PACIFIC
DATAVIZ
CHALLENGE**



GOUVERNEMENT DE LA
NOUVELLE-CALÉDONIE

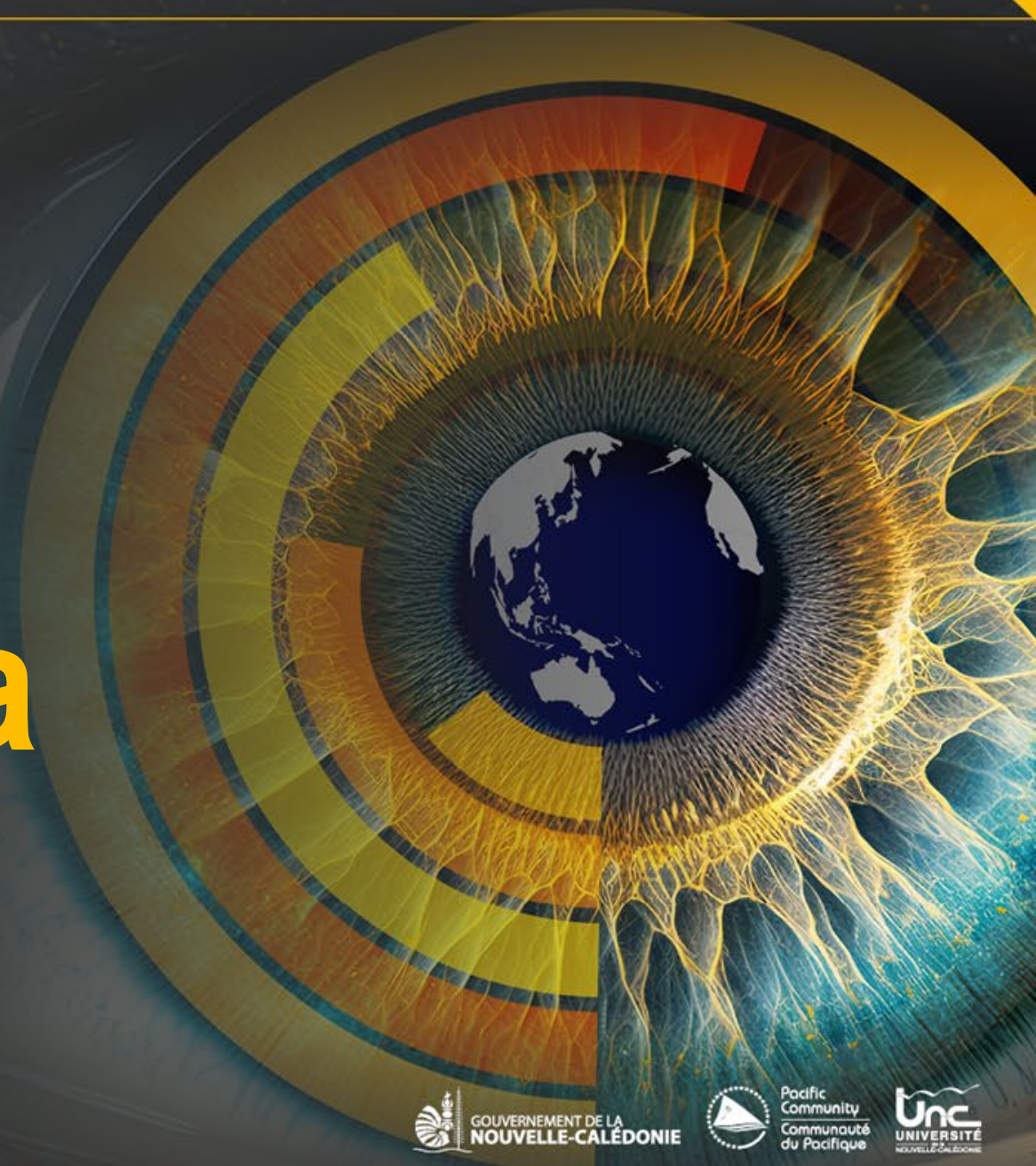


Pacific Community
Communauté
du Pacifique

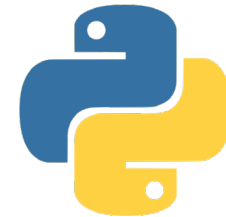
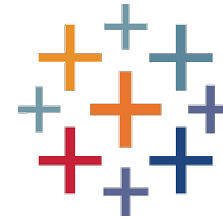


Neuroscience and storytelling for Impactful data visualizations

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My background on data visualization



Neuroscience and Data Visualization



Neuroscience applied to Data Visualization



Neuroscience studies **how our brain works**, how it reacts to stimuli, and what things are easier to process.

Our **evolution** has crafted our brains to ensure our **survival**, therefore we pay more attention to something that's moving because it could be dangerous.

We didn't have to deal with graphs until recently in history, so we are **not yet prepared to understand data visualizations instinctively**.

Neuroscience Research



Our brain is lazy, so we must help it to focus on the **highlight we want our audience to remember.**



Make your presentation **quick, clear, and interesting.**



Use **blank space and clear, simple imagery.**

The brain is frustrated by tasks that take too long to resolve, Clutter, and Messages that distract or don't apply.

Neuroscience Research



Higher attention at the **beginning and the end** (to save energy).

Repetition helps form a bridge from our short-term memory to our long-term memory.



83% of our memories come visually.

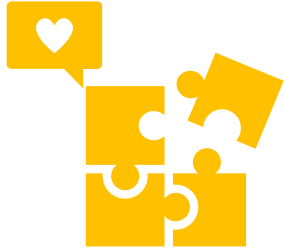
Images are easier and faster to understand.



We are programmed to **focus on movement, novelty, and on human faces.**

We are sensitive to highly evident contrasts: before-after, risky-safe, with-without, fast-slow. **Clear contrasts help deciding.**

Neuroscience Research



The brain loves simple **puzzles** and **humor**.

Simple puzzles intrigue and attract the brain.

Use **emotion** to reach out to the audience.



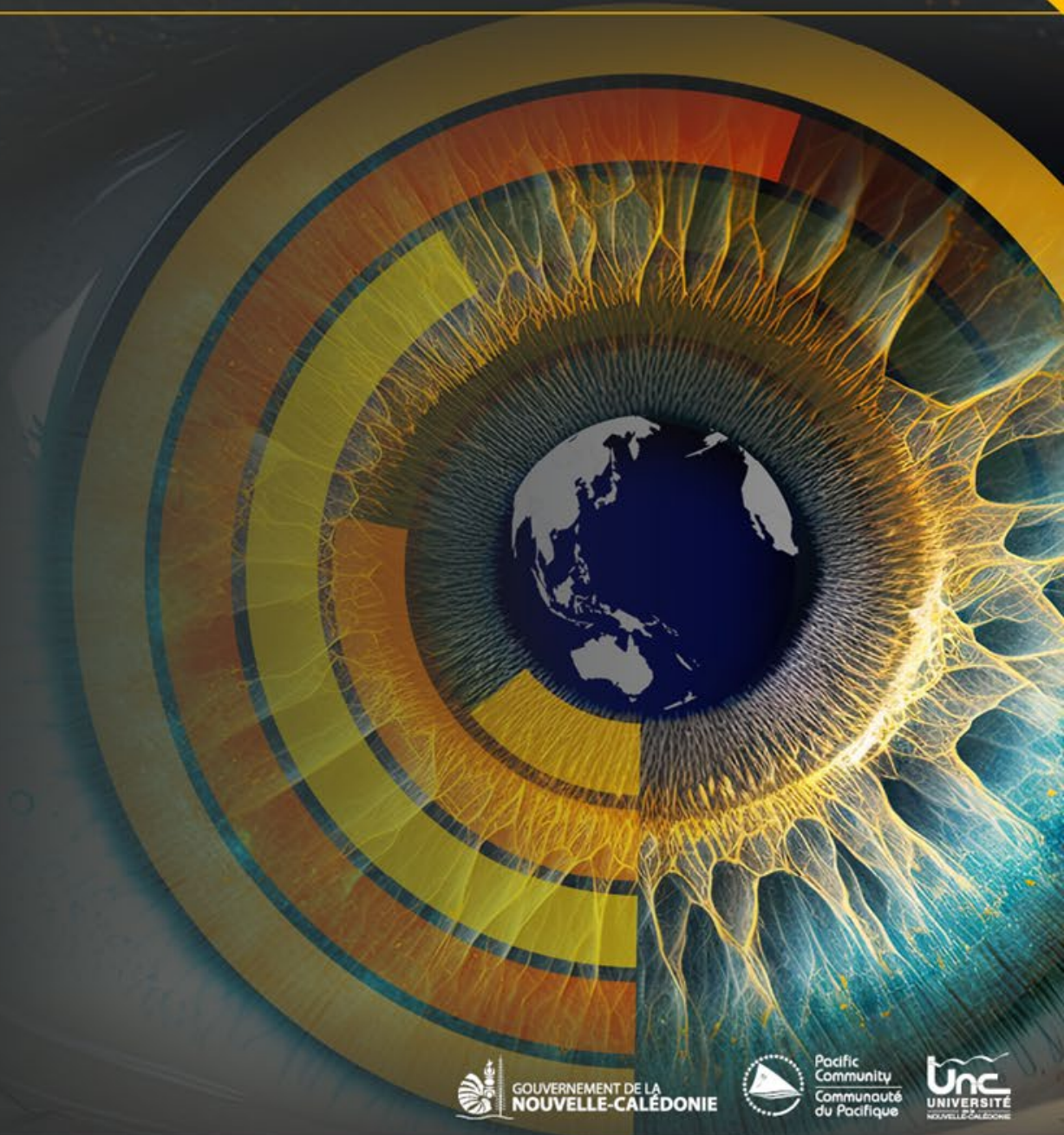
The human brain is **selfish** and will focus on what is beneficial for itself.



A **complicated** chart that requires cognitive resources **will likely be ignored**.

If it requires more than a few seconds to understand, the brain gives up, and often rejects the message.

Storytelling and Data Visualization



Why Storytelling?

Since the beginning of Civilization, the **knowledge transfer** from one generation to the next was done through **stories**.

Before the existence of writing or numbers, people gathered around the bonfire to tell stories about their experiences.



Our brain is wired to **understand and learn intuitively while listening to stories**. This is not the case with graphs or numbers.

Storytelling consists in transforming a graph into a story that can be assimilated in a more natural way.

<https://www.meetcortex.com/blog/the-history-of-storytelling-in-10-minutes>

Why Data Storytelling?

Data storytelling combines

- storytelling,
- data science,
- and visualizations,

to create not just a colorful chart or graph, but a **method of communicating** information that is **custom-fit for a specific audience**, and offers a **compelling narrative** to prove a point, highlight a trend, make a sale, or all of the above.

Why Data Storytelling?

Data storytelling is an effective way to get your team and your users the answers they need with a **minimum amount of time and effort committed on their part.**

Data storytelling allows us to put a human perspective on a data set and convey **emotion** and **intuition** seamlessly.

Storytelling Principles

Context

Who is your audience?
What do you need them to know or do?

Functionality

Choose the proper graph according to what we want to show

Eliminate clutter

If an element doesn't add value, it shouldn't be there

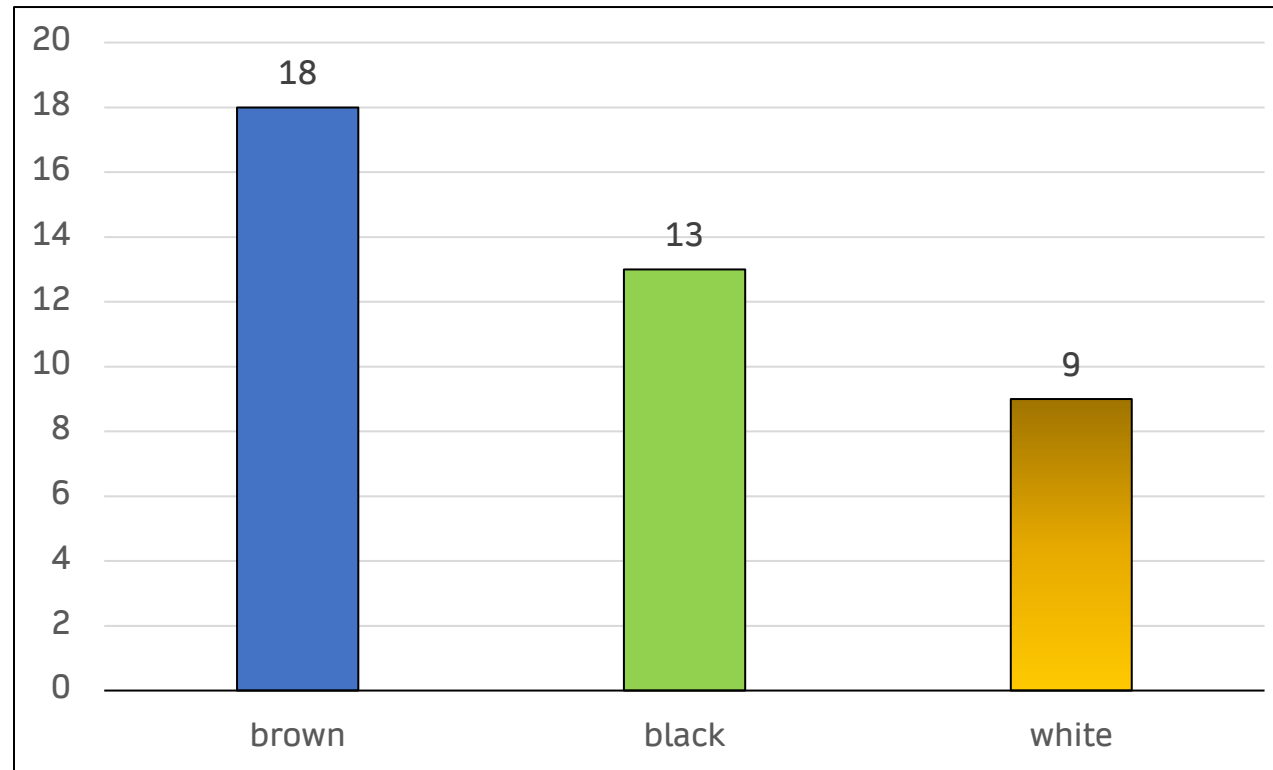
Focus attention

Take advantage of color, form and distribution

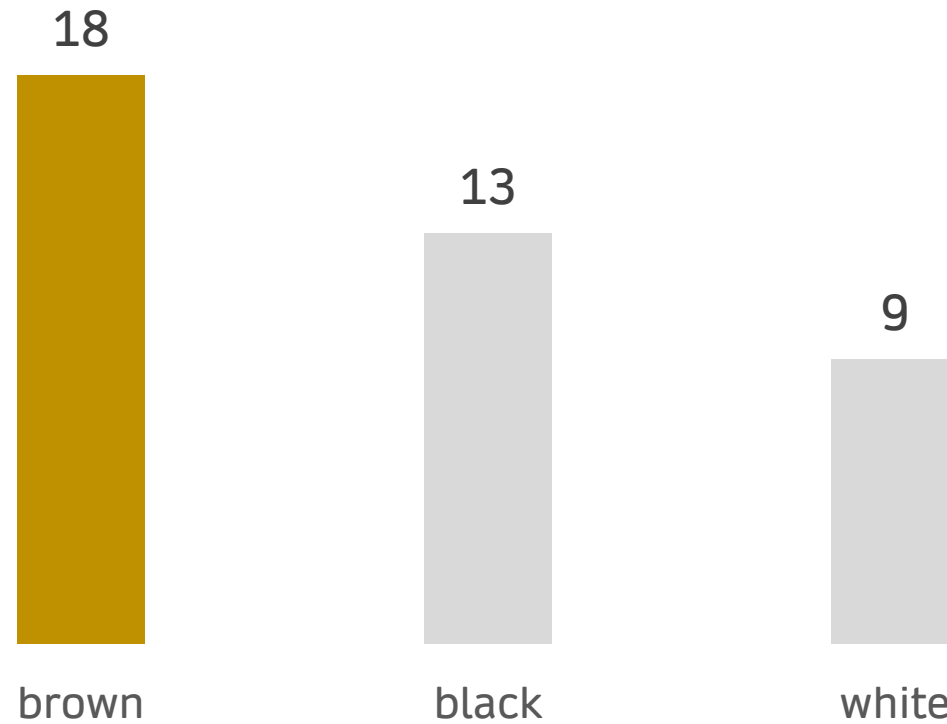
Applying the theory



How can we improve this graph?



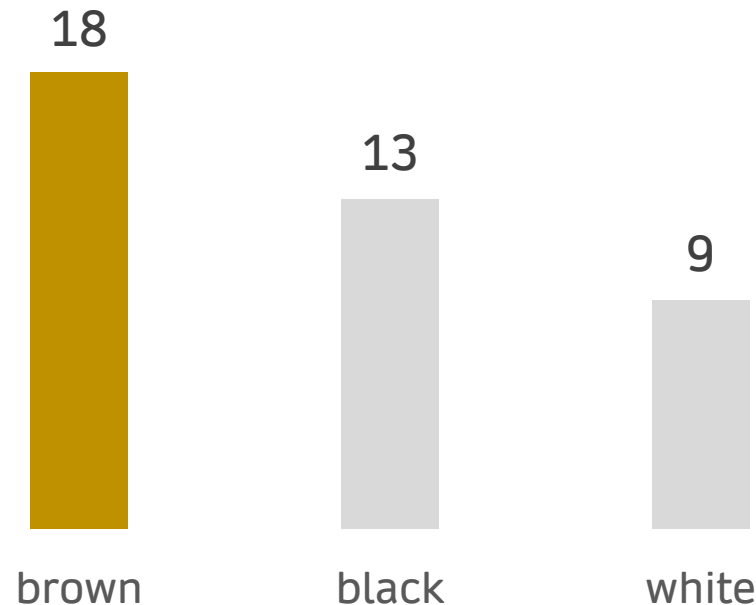
Is there a story to tell?



Brown will be the brand's new color

Over the 3 focus groups conducted to see the consumer's reactions, the brown option has been the preferred option since it is connected to the brand's main values.

Brown is easily associated with nature, outdoors, and trekking which is exactly what the brand "xx" stands for.



Other colors that showed positive connections were Black and White, but they weren't as strong as Brown.

Let's connect!

#Data
#Analytics
#Dashboards
#PowerBI
#Tableau
#Storytelling
#Business Intelligence



Any questions?

