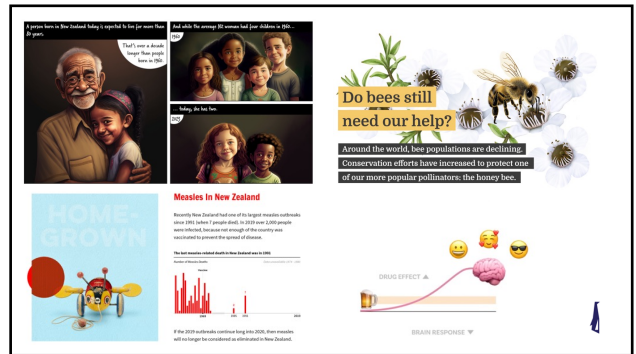




1



2



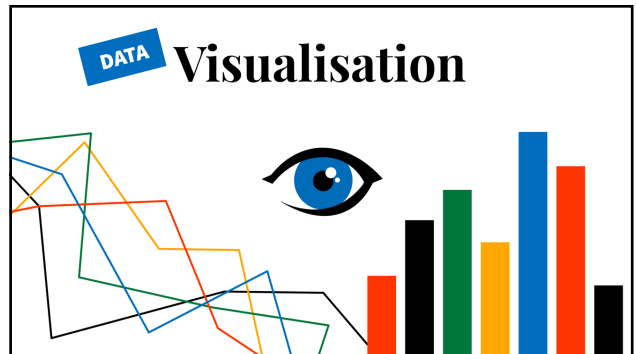
3



4



5



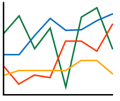
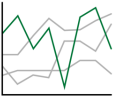
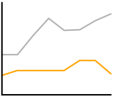
6


Reasons to visualise data

TO DISCOVER

TO INFORM

TO EDUCATE



7

Discover

**“CURIOSITY KILLED THE CAT.
BUT SATISFACTION
BROUGHT IT BACK.”**



- Iggy Pop

8

Discover



TO FIND

DATA INSIGHT

What is it? **Who is it for?**

ANALYSIS CHARTS

ONLY YOU





9


START

Who is your data visual for?


YOU
SOMEONE ELSE



Discover



Inform




Educate

10

Inform

**“A ROOSTER CROWS ONLY
WHEN IT SEES THE LIGHT
PUT HIM IN THE DARK
AND HE’LL NEVER CROW”**



- Muhammad Ali

11

Inform




TO MAKE DATA

EASILY ACCESSIBLE

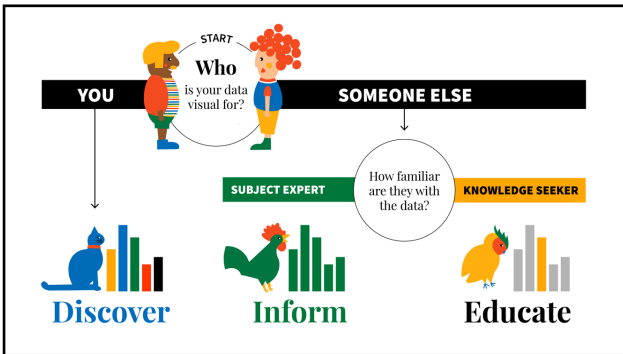
What is it? **Who is it for?**

DASHBOARD

SOMEONE ELSE

12



13

Educate

“THERE’S ALWAYS A HIDDEN OWL IN ‘KNOWLEDGE’”

- E.L. Jones

14

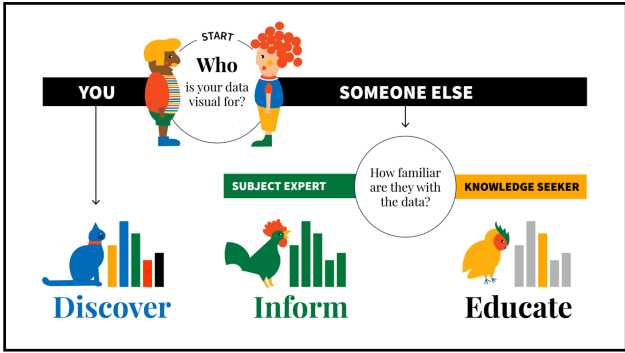
Educate

TO EXPLAIN DATA MEANING

What is it? DATA STORYTELLING

Who is it for? SOMEONE ELSE

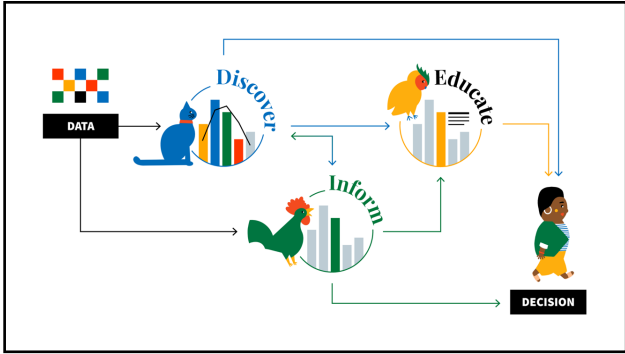
15



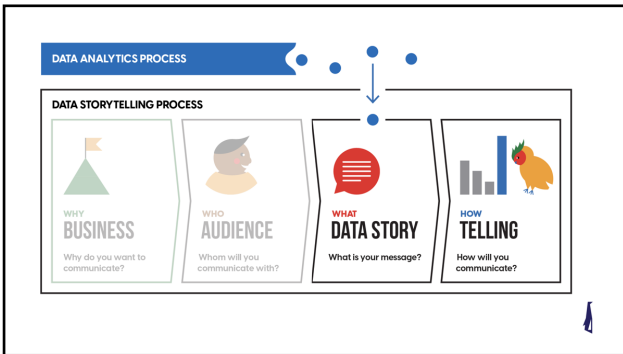
16

It’s **okay** to visualise the same data, differently.

17



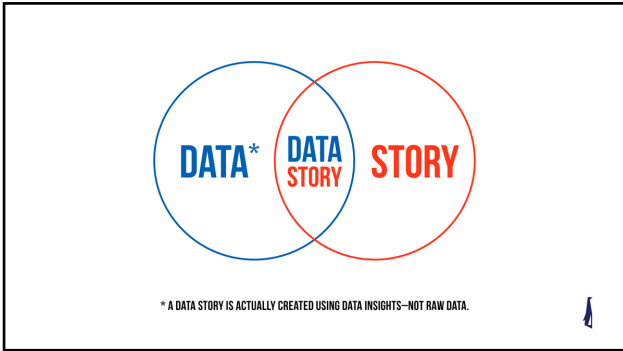
18



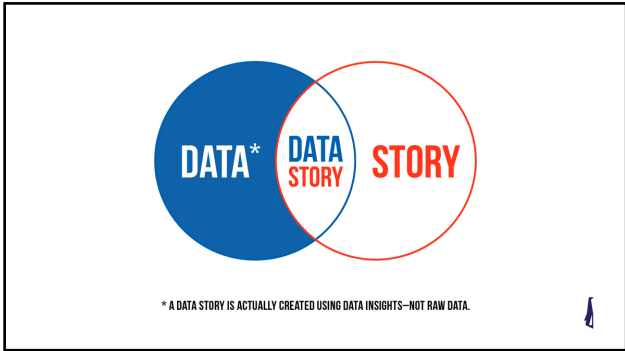
19



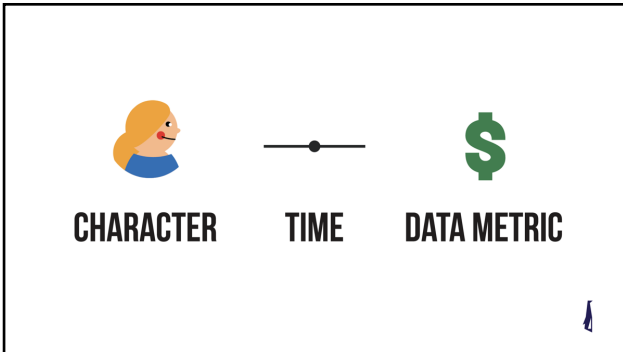
20



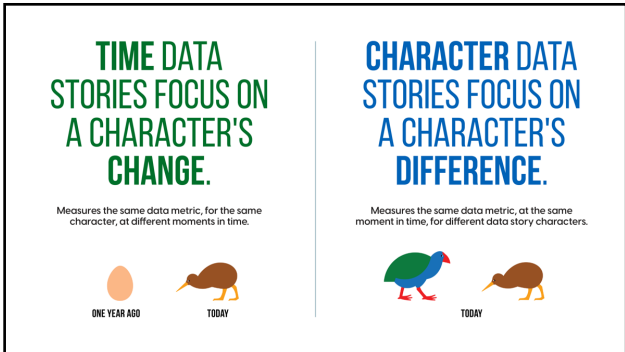
21



22



23



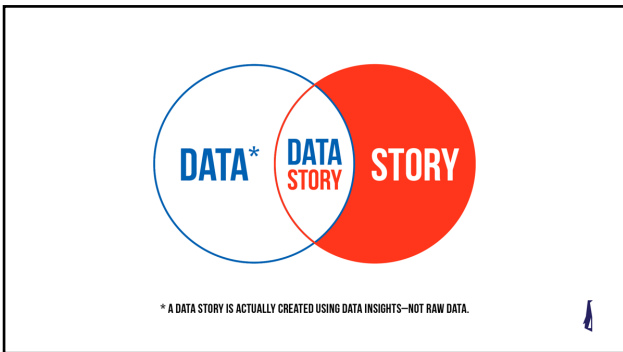
24



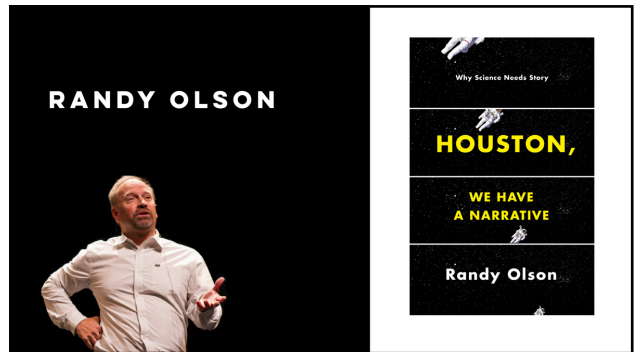
25

TIME DATA STORY CANVAS		
1. Data Metric: What data metric is changing? Ratio of male to female hatchlings	2. Character: Who (or what) does the Data Metric describe? Green sea turtle	
3. Times Select two time points when the Data Metric will be measured (to highlight its change).	Time 1 1980	Time 2 Today
4. Data Change Record the Data Metric's measurements at Times 1 and 2. Calculate the difference between data measurements (or the Data Metric's Change).	Data (Time 1) 1 male to 6 females	Data (Time 2) 1 male to 116 females Change: +110 females (-1.800%)
5. Character Change (an expression) Times • Character • Data Metric • Data Change Today, for every male green sea turtle that hatches, there are 116 females (up from 6 in 1980).		
6. Impact: How was the Character impacted by the change? <input type="checkbox"/> Positively <input type="checkbox"/> No change <input checked="" type="checkbox"/> Negatively		
7. Reason: Why did the Character Change happen? Rising global temperatures		
8. Unknowns: What don't you know about the Character Change? How much will this change impact the survival of the species? Is this ratio getting worse? Are other species impacted?		
9. Reaction: How do you respond to the Character Change?		
What was learned from the Research? These turtles aren't adapting to the rate of climate change	What can be done to remove Unknowns? Research on similar animals' response to climate change	What can be done to improve Impact? Nest management strategies
10. Context: What else does your audience need to know to understand the Character Change? The sex of a baby green turtle is determined by the temperature of the nest it develops in.		

26



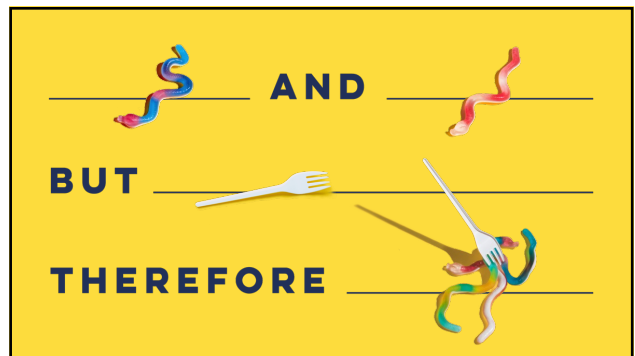
27



28



29



30

Africa's animal kingdom is ruled by lions.

and Simba is a young lion who will succeed his father (Mufasa) as King.

but when Simba's uncle Scar murders Mufasa, Simba is tricked into thinking he is responsible and flees his homeland.

therefore , Simba needs to overcome his guilt before he can take his rightful place as King.

31

There was once a girl.

and she lived with her aunt and uncle.

and her life was pretty boring.

but one day a tornado swept through her home and carried her into the land of Oz.

therefore , she had to find the wizard in Emerald city to help her return home.

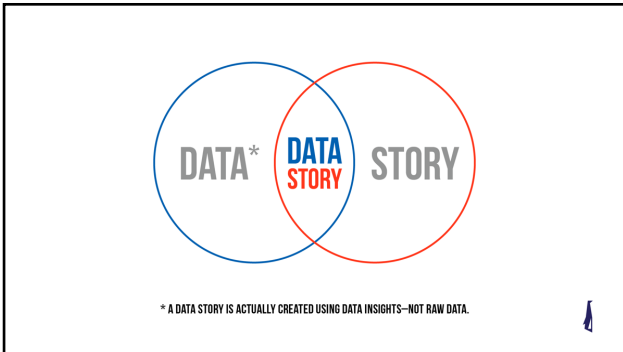
32

and	but	therefore
also	despite	so
equally	however	thus
identically	yet	consequently
uniquely	conversely	hence
like	rather	thereupon
moreover	whereas	accordingly
as well as	although	as a result
furthermore	otherwise	henceforth
likewise	instead	for this reason
similarly	albeit	in that case

33



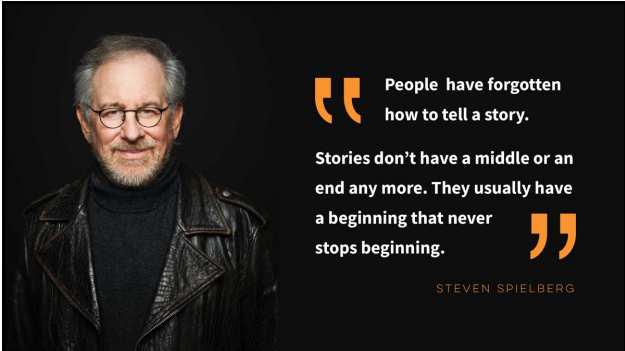
34



35



36



37



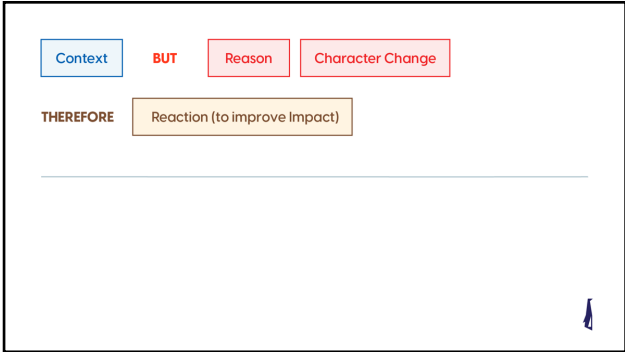
38



39

TIME DATA STORY CANVAS	
1. Data Metric: What data metric is changing? Ratio of male to female hatchlings.	2. Character: Who (or what) does the Data Metric describe? Green sea turtle
3. Times Select two time points when the Data Metric will be measured (to highlight its change)	Time 1 1980 Time 2 Today
4. Data Change Record the Data Metric's measurements at Times 1 and 2. Calculate the difference between data measurements (for the Data Metric's Change).	Data (Time 1) 1 male to 6 females Data (Time 2) 1 male to 116 females Change +110 females (-1800%)
5. Character Change (an expression) Times • Character • Data Metric • Data Change Today, for every male green sea turtle that hatches, there are 116 females (up from 6 in 1980).	6. Impact How was the Character impacted by the change? <input type="checkbox"/> Positively <input type="checkbox"/> No change <input checked="" type="checkbox"/> Negatively 7. Reason Why did the Character Change happen? Rising global temperatures 8. Unknowns What don't you know about the Character Change? How much will this change impact the survival of the species? Is this ratio getting worse? Are other species impacted? 9. Reaction How do you respond to the Character Change? What was learned from the Reason? These turtles aren't adapting to the rate of climate change What can be done to remove Unknowns? Research on similar animals response to climate change What can be done to improve Impact? Nest management strategies
10. Context What else does your audience need to know to understand the Character Change? The sex of a baby green turtle is determined by the temperature of the nest it develops in.	

40



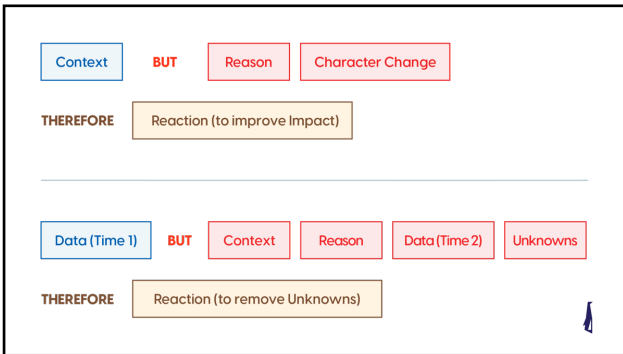
41

The sex of a baby green turtle is determined by the temperature of the nest it develops in.

but a warming climate is altering this temperature dependent sex determination process. For every male green sea turtle hatching today, there are 116 females hatching (up from 6 females in 1980).

therefore, there is an immediate need for nest management strategies to avoid a green turtle population collapse.

42



43

In 1980, for every one male green sea turtle that hatched, 6 females hatched.

but because the sex of a baby green turtle is determined by the temperature of the nest it develops in, rising global temperatures have pushed this ratio up to 116 females hatching today. We don't know the longterm impact of this.

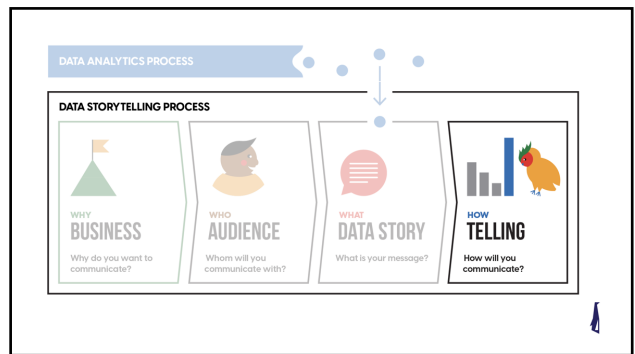
therefore, more research is recommended to understand if green sea turtles (and other species) are under threat from a changing climate.

44

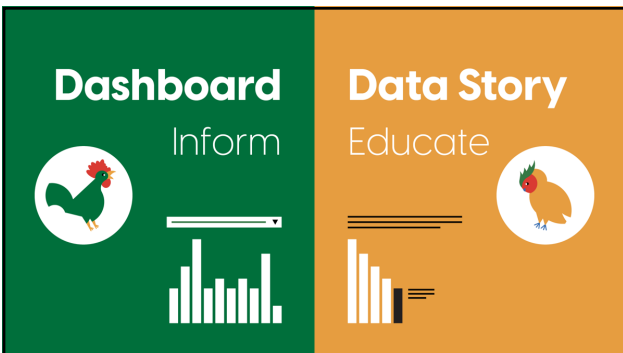
“ It was so easy for you to read ... because it was so hard for me to write. ”

HENRY LONGFELLOW

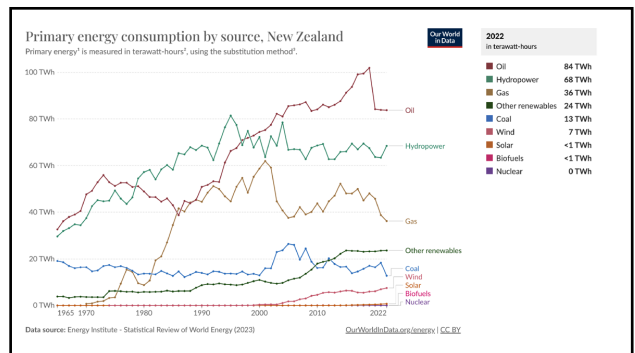
45



46



47



48

Data storytelling visuals focus on communicating one takeaway.

49

To best visualise your takeaway...

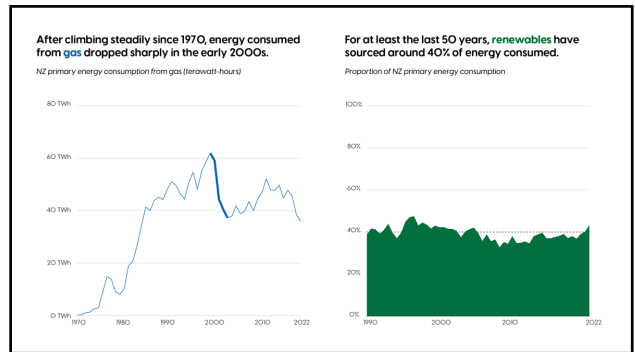
1. What data do you need to visualise?
2. What chart type is best?
3. What visual contrast can you add?

50

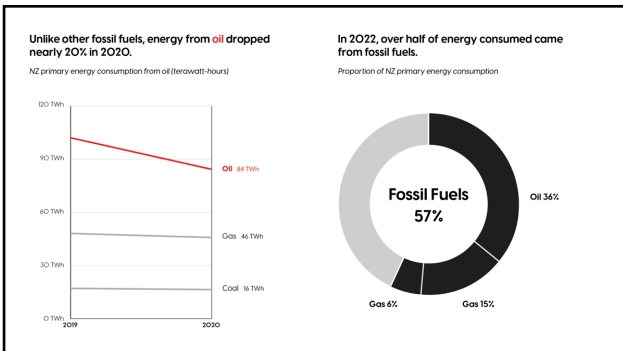
THE MORE DESIGN CONTRAST YOU TRY TO ADD, THE LESS YOU END UP HAVING.

BE CLEAR ON THE MESSAGE YOU'RE HIGHLIGHTING

51



52



53

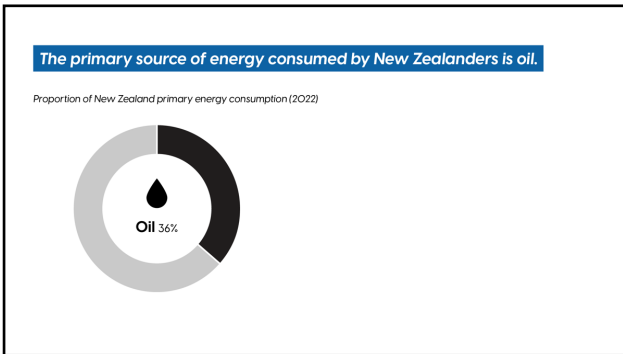
Data story

"The primary source of energy consumed by New Zealanders is oil. The fossil fuel accounts for over a third of total energy consumption.

In 2022, the country produced six million barrels of crude oil. To put this into perspective, if refined into petrol and diesel, it could fill the fuel tanks of every car in New Zealand three times over. However, indigenous crude oil is exported because there is no local refining capacity.

Therefore, New Zealand depends on the global market to meet its energy demands. All the country's refined oil is imported, with the majority coming from Singapore."

54



55

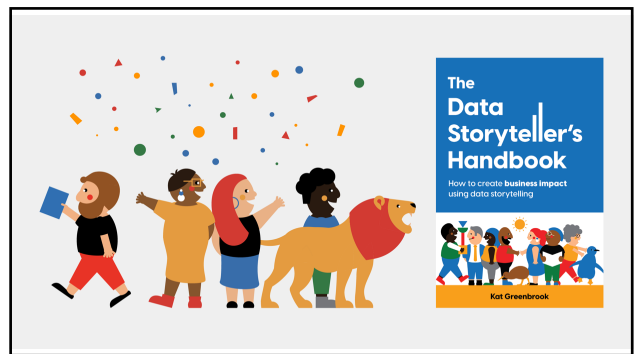
DATA VISUALS SHOULD NOT BE SHARED AS PART OF A DATA STORY UNLESS THEY HELP TO TELL IT.

56

KNOW YOUR

	Discover	Inform	Educate
	ANALYSIS	COMMUNICATION	COMMUNICATION
Reason			
Audience	×	✓	✓
Message	×	×	✓
Design			
- Design contrast	×	Maybe	✓
- Takeaway titles	×	×	✓

57



58