



# Storytelling with data

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# Agenda

- Introduction
- Data Analytics
- Visual Analytics
- Storytelling & Audience
- Structuring
- Connecting
- Touching

# Introduction

# 12 ปี นักษัตร



# Storytelling with Data



# Data Analytics



# Hello **DATA** Companies

"Is Facebook a software company?"  
They're not, they're data companies.

Forbes.com

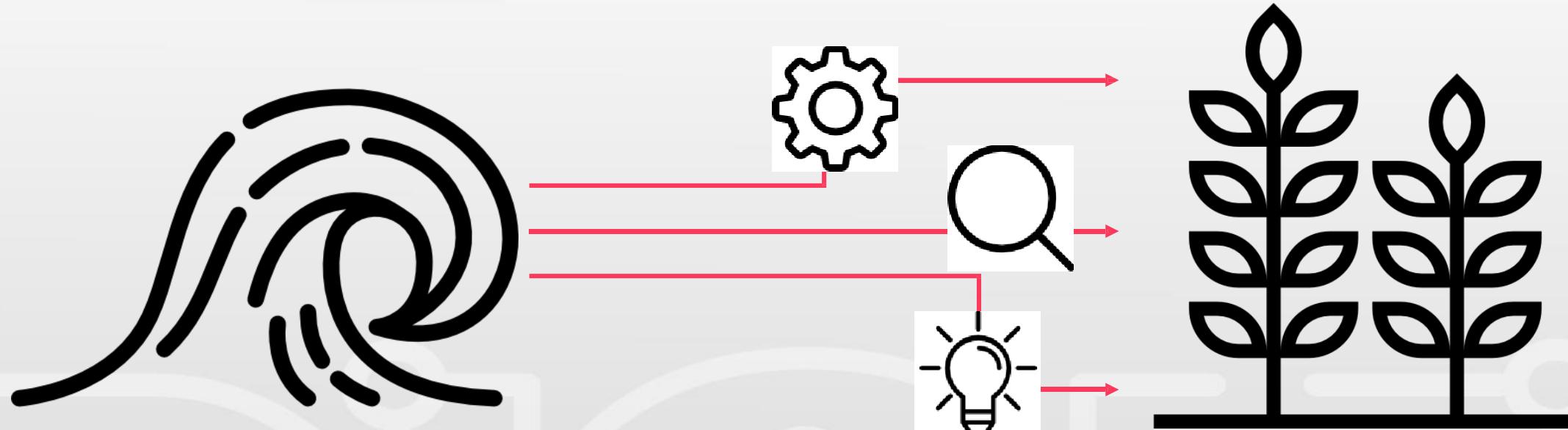
"Alibaba defines itself as a big-data company,"  
says Zhang Jianfeng, the company's CTO.

technologyreview.com

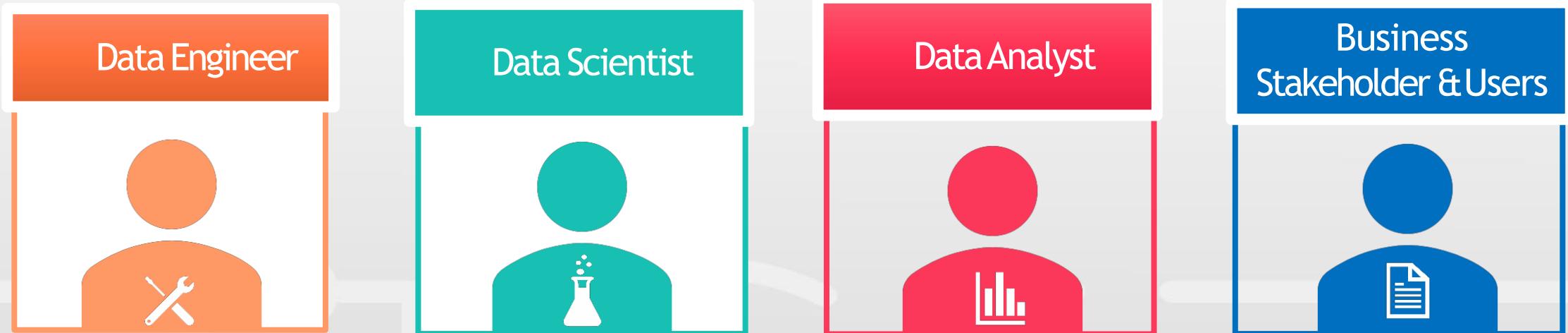


**DATA** provides  
*digital traces* of customers

# From Ocean of Data to Field of Intelligence



# Data Team



# Data Team Role Based



- Collect data
- Prepare Data
- Design Data Lake & Datamart
- Cleaning & Transform Data



## Data Scientist

- Develop and Building Models for address business problem
- Mining Data for data analytics



## Data Analyst

- Produce meaningful data report and visualizations
- Communicate results and ideas to key decision makers



## Business Stakeholder & Users

- Define and clarify business requirement and problem
- Present information using data visualization

# Visual Analytics



# Meaning of Colors

# สีและอารมณ์ต่าง ๆ



# สีและอารมณ์ต่าง ๆ

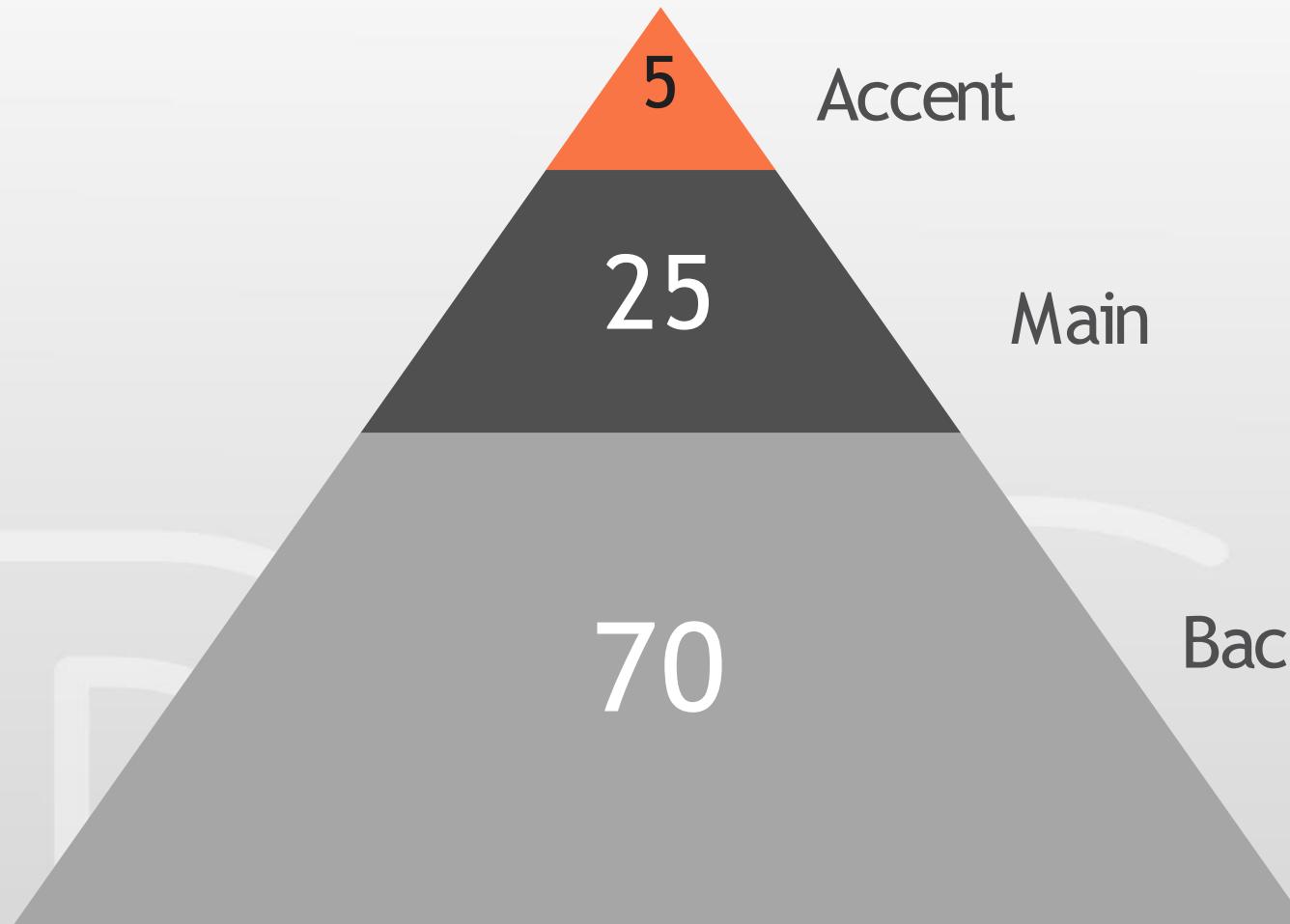


# ສີແລະວາຣມນົດຕ່າງ ၅



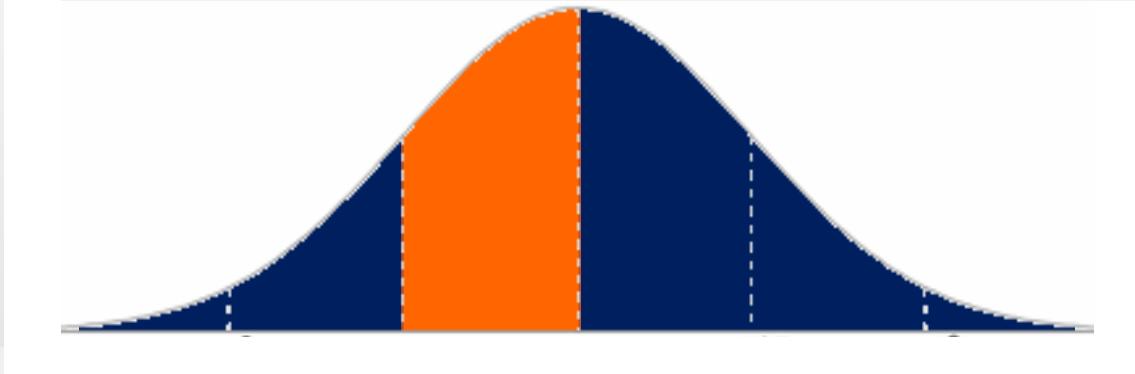
# Rule of Colors

# Color Rule



70 :25 :5

# Example



70%

Background

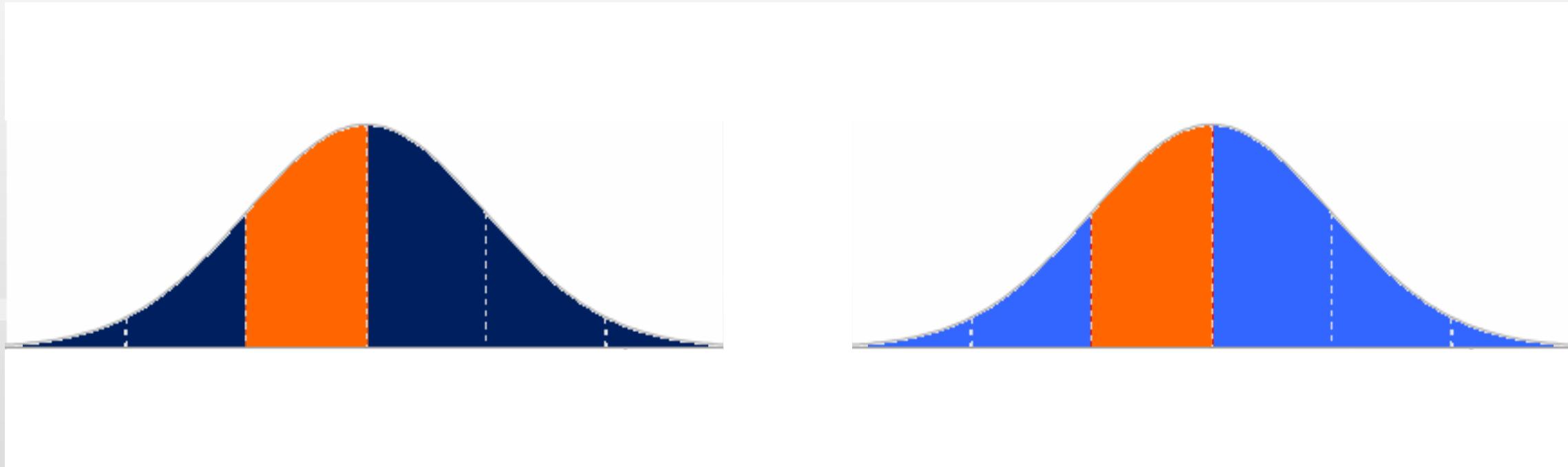
25%

Main

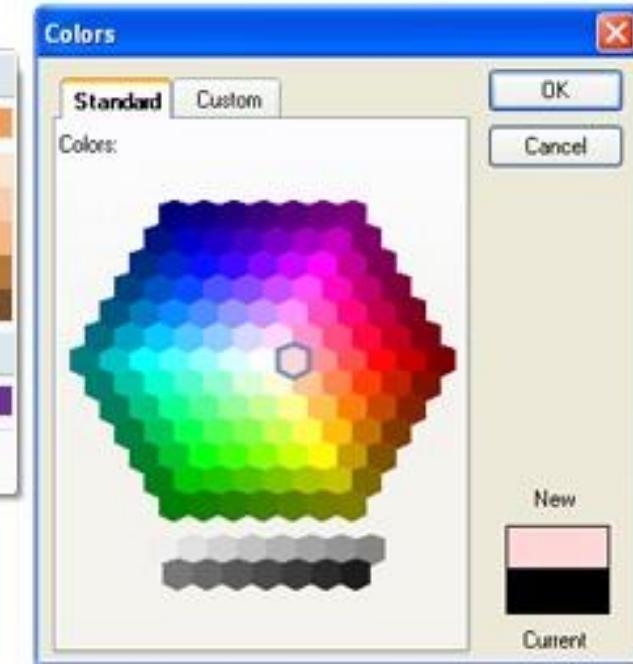
5%

Accent

# Example

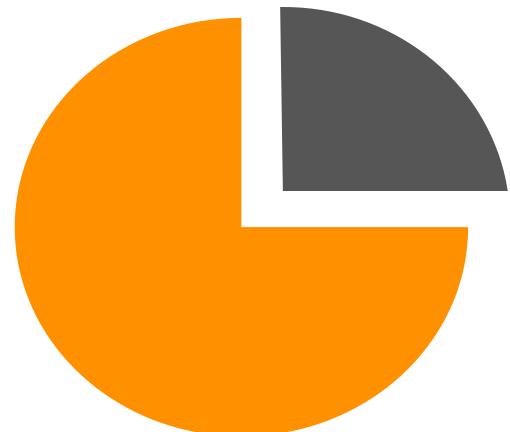
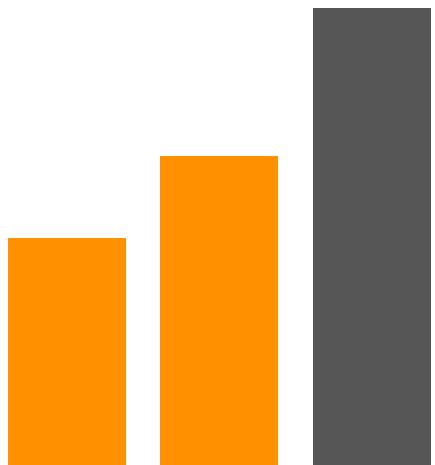
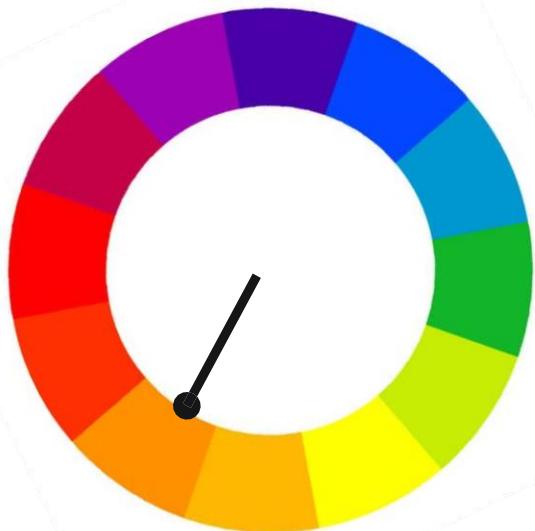


# Different hue



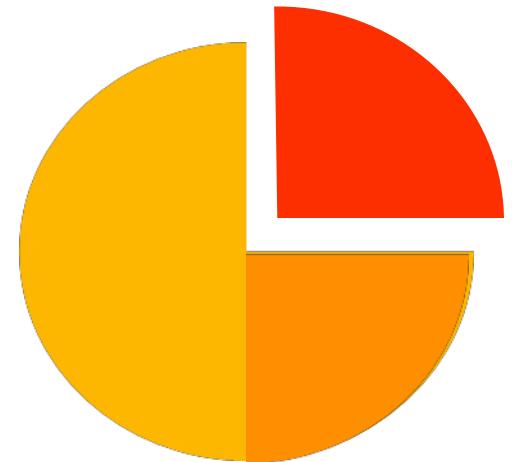
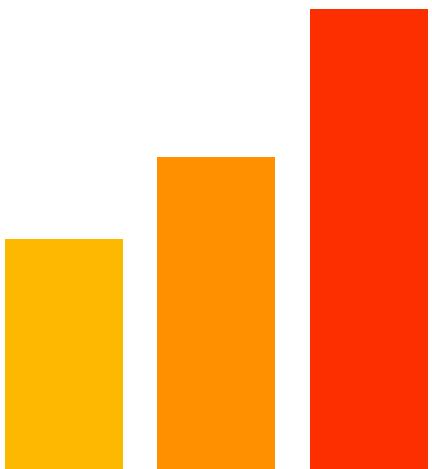
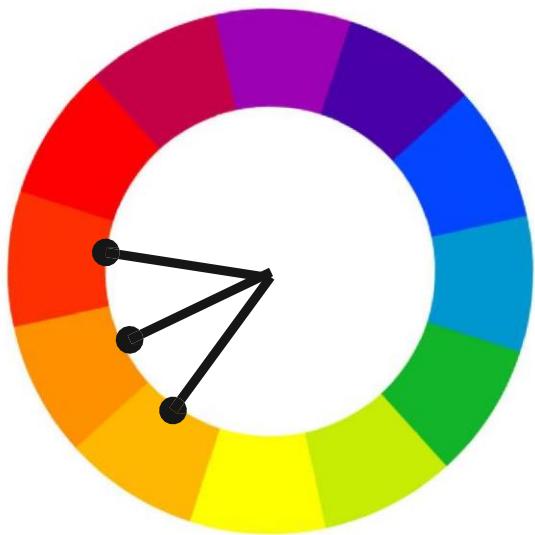
# Color selection

## 1. Monochrome



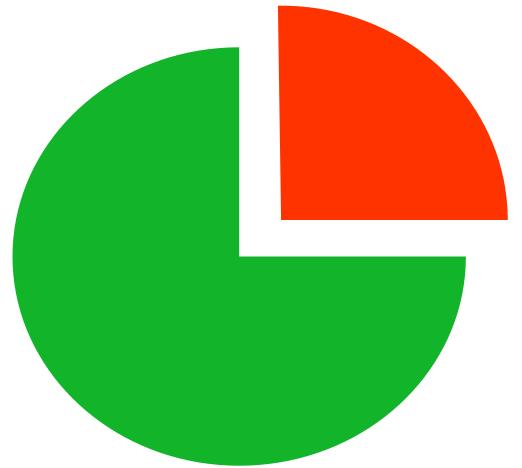
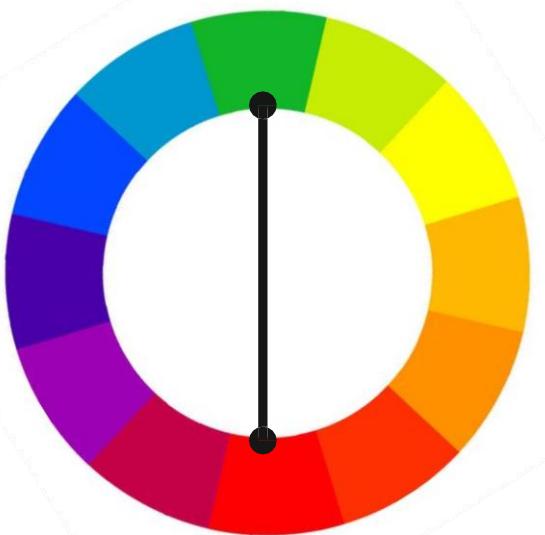
# Color selection

## 2. Analogous



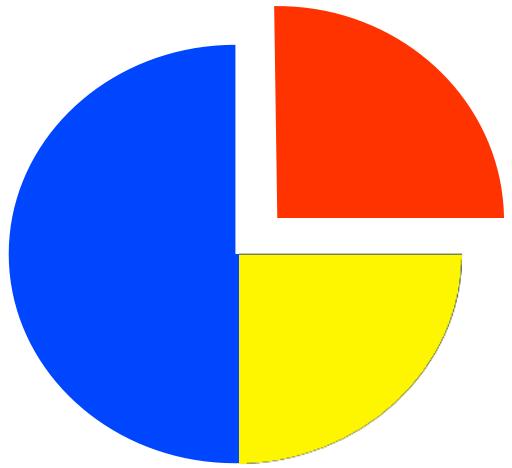
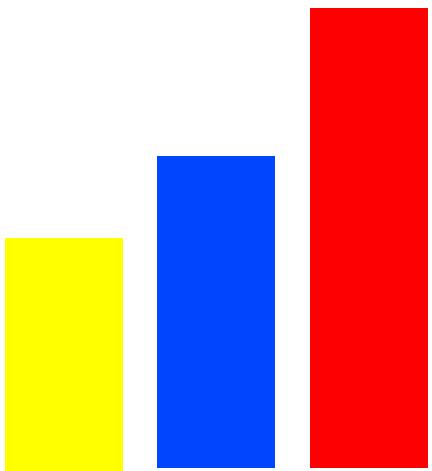
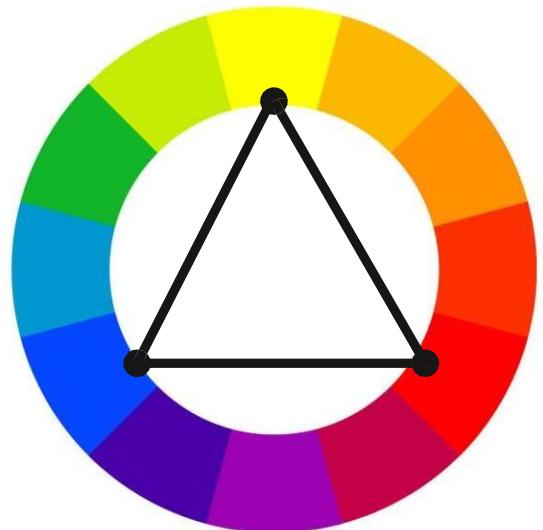
# Color selection

## 3. Complimentary

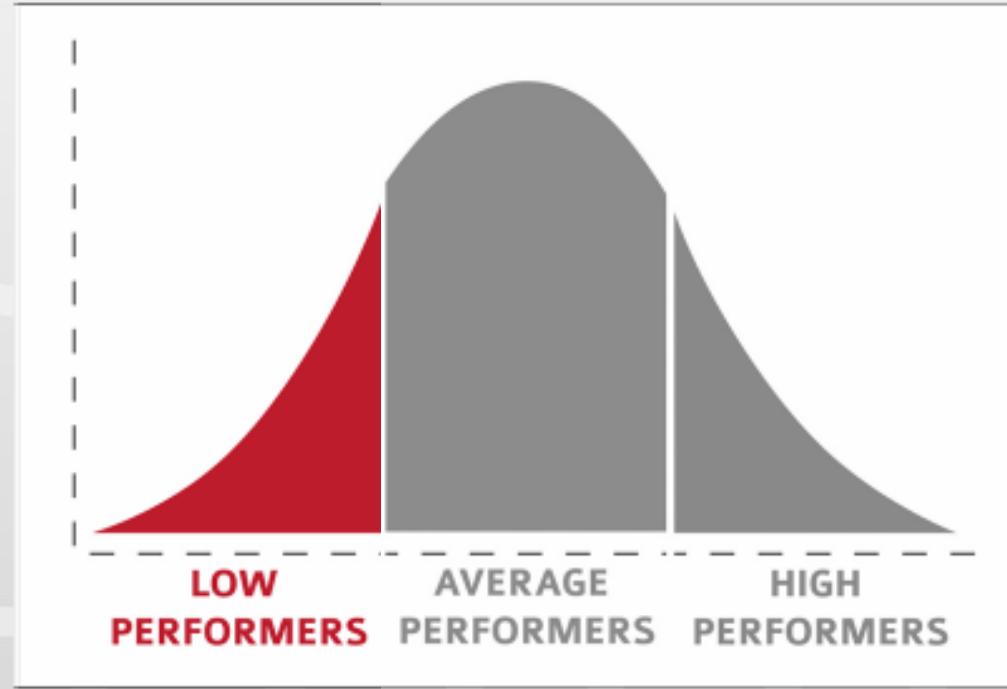
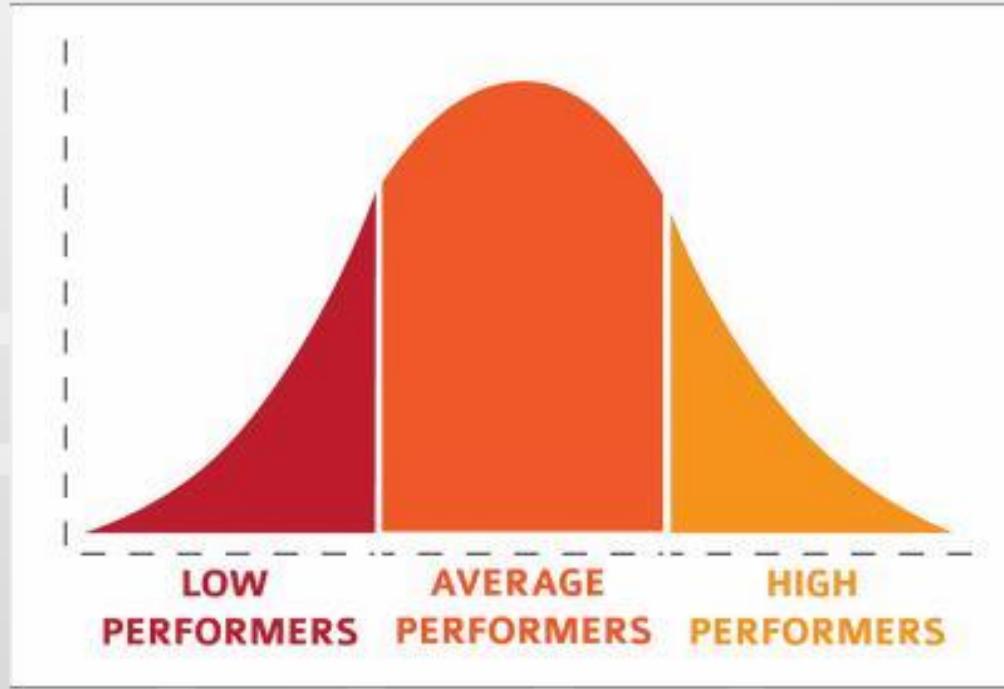


# Color selection

## 4. Triad



# Key Message



# Typography

- Use one font
- Justify left is easier to read
- Create a typographic hierarchy
- Space and meaning

## Gill Sans

**Warm & Friendly**

IT'S BETTER WITH GILL SANS

Clean and Understated

## Helvetica

**Natural & Simple**

**Easy to Read**

Even in smaller weights

## Futura

Elegant & Understated

**Great Readability**

*It has Personality*

## Garamond

Mature & Professional

Clean & Sharp

*Rich in History*

## Rockwell

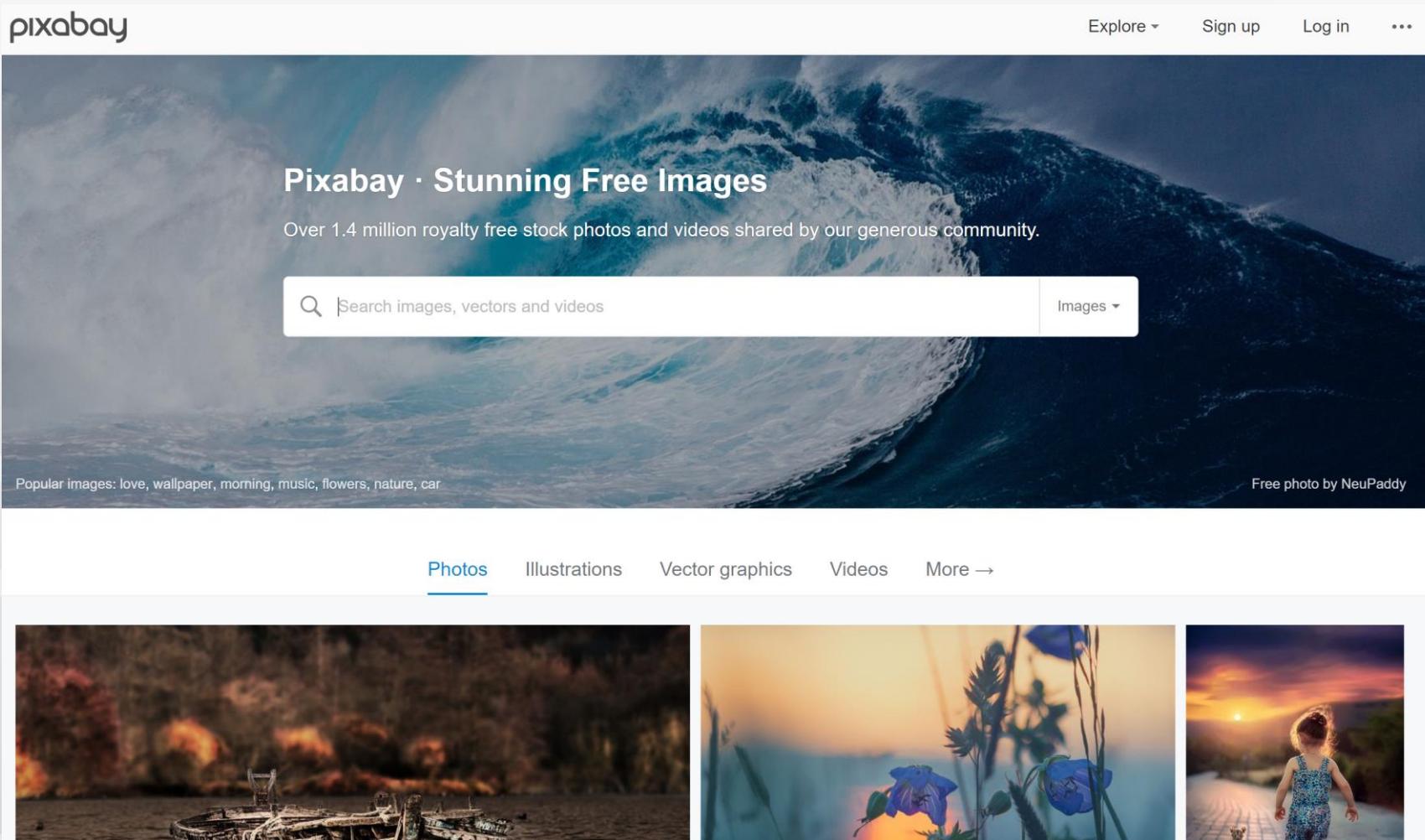
**Powerful & Bold**

Distinctive & Confident

*Great for Headlines*

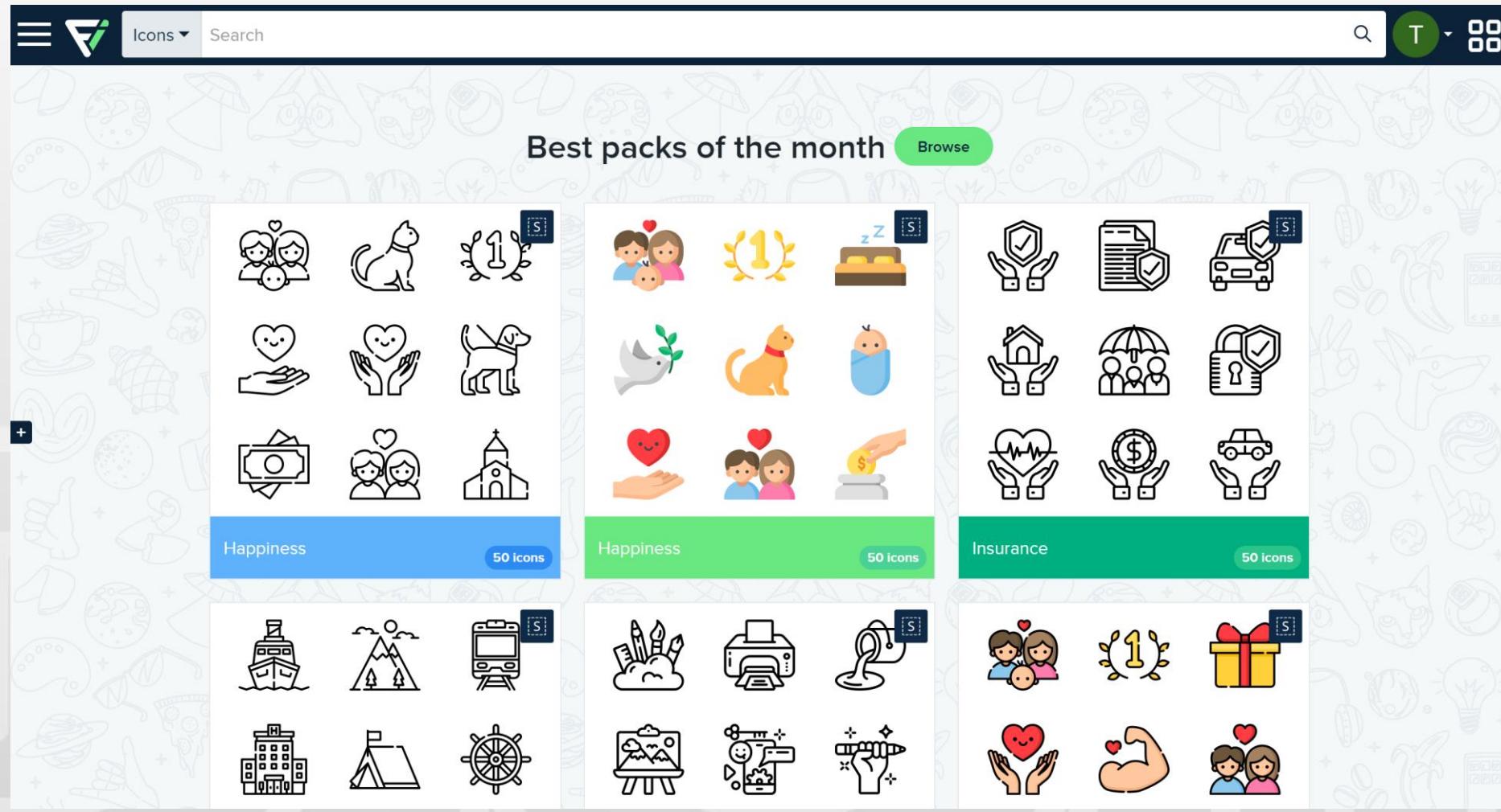
# Artwork

<https://pixabay.com/>

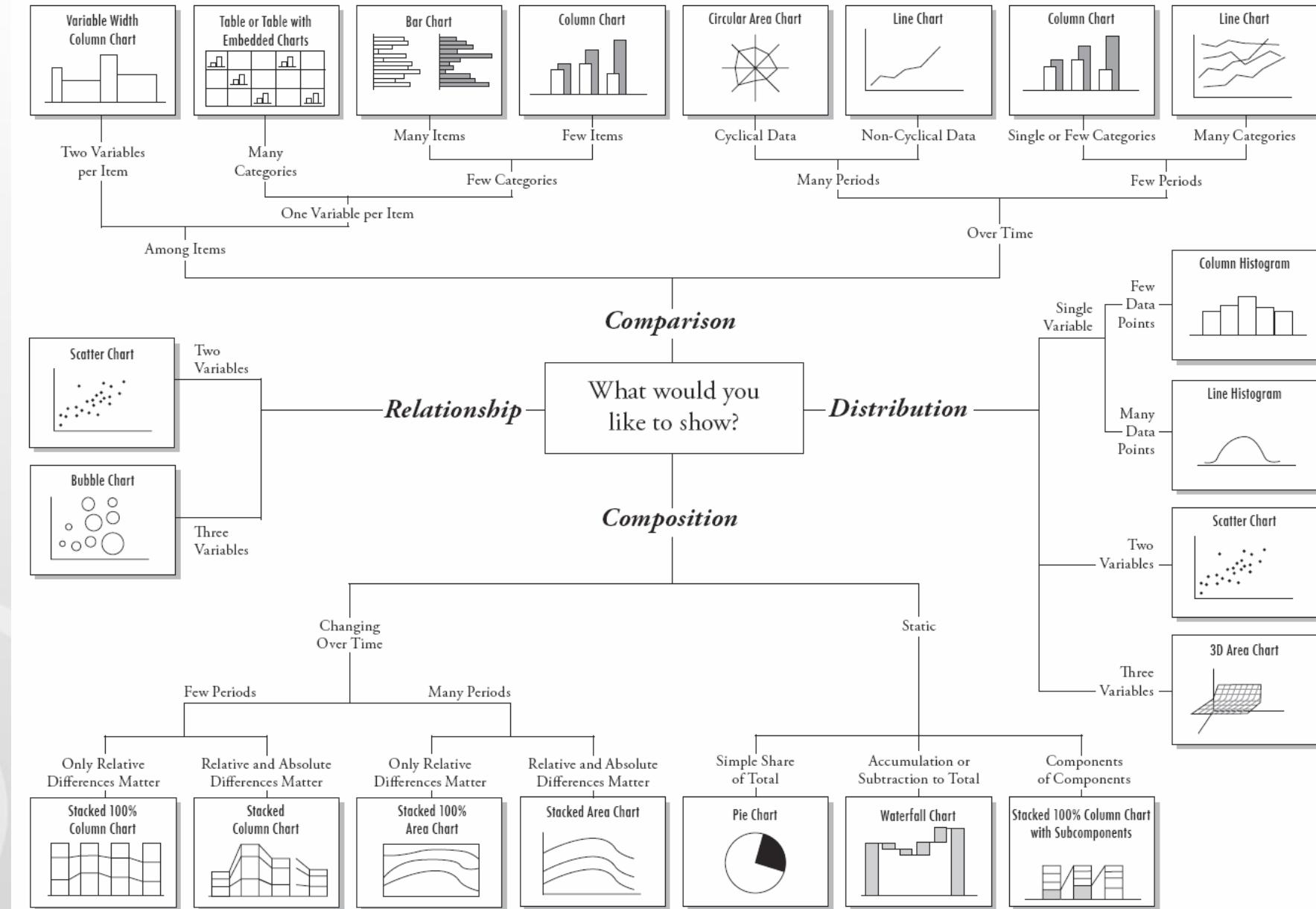


# Icon

<https://www.flaticon.com>



# Charts



# Stay Organized

It's common for good presentations to have table of content pages which is re-introduced at the front of each section - telling the audience where in the flow of the presentation they are. These are road markers.



## Contents

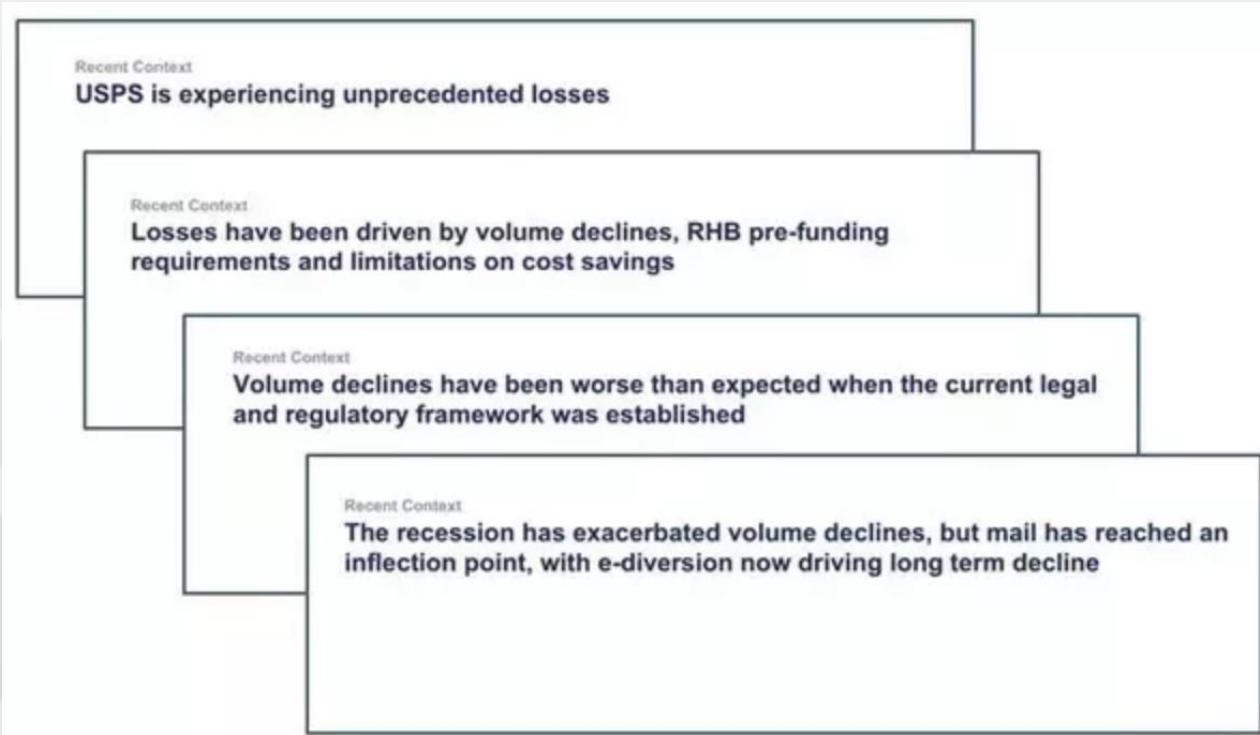
### ▪ Recent context

- Base case – minimal management actions
- Addressing the challenge
- Short term requirements

McKinsey & Company | 1

# Parallel structure in titles

The titles of the pages are the most valuable real estate - use them wisely. It's storytelling, so the **titles should come together cohesively**. The titles should read well - similar structure, tense, tone, format. Like an essay, the points should be clear with transitions between the arguments.



# Credibility through data and documentation

It is your job to gain credibility throughout your presentation. You need to convince audience that numbers you are showing are correct and not fabricated.

Clear footnotes indicate where the data comes from even if it coyly says "McKinsey Research".

Global payments revenues have resumed a healthy growth rate after the crisis; Asia Pacific will account for 56% of overall growth

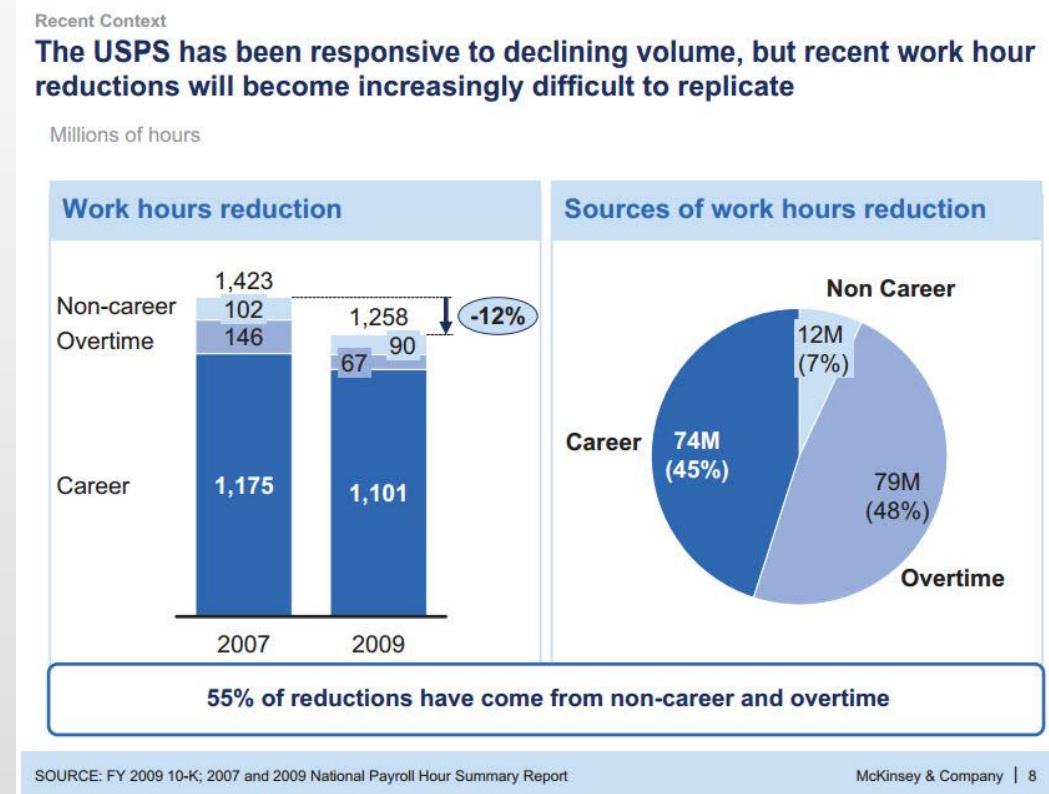


# Make sure each page has a point

Senior managers are trained to push presenters to answer the question "So What" for each page.

Each page needs to say something clearly to the audience, or it needs to be taken out.

In this page, you see there is a kicker box which says 55% of the reduction came from overtime and non-career cuts.



# Place your point

If Location A contract can be renegotiated to Location B rates, it can save \$450,000 annually in leasing costs

Facility	Recommended Strategies	Notes	Monthly Costs*
Location 'A'			
Location 'B'			
Location 'C'			
Location 'D'			
Location 'E'			

Some firms require consultants to use the title to say exactly what the point of the slide is

## Warehouse cost comparisons

Facility	Recommended Strategies	Notes	Monthly Costs*
Location 'A'			
Location 'B'			
Location 'C'			
Location 'D'			
Location 'E'			

Adding a red box to highlight the focal point

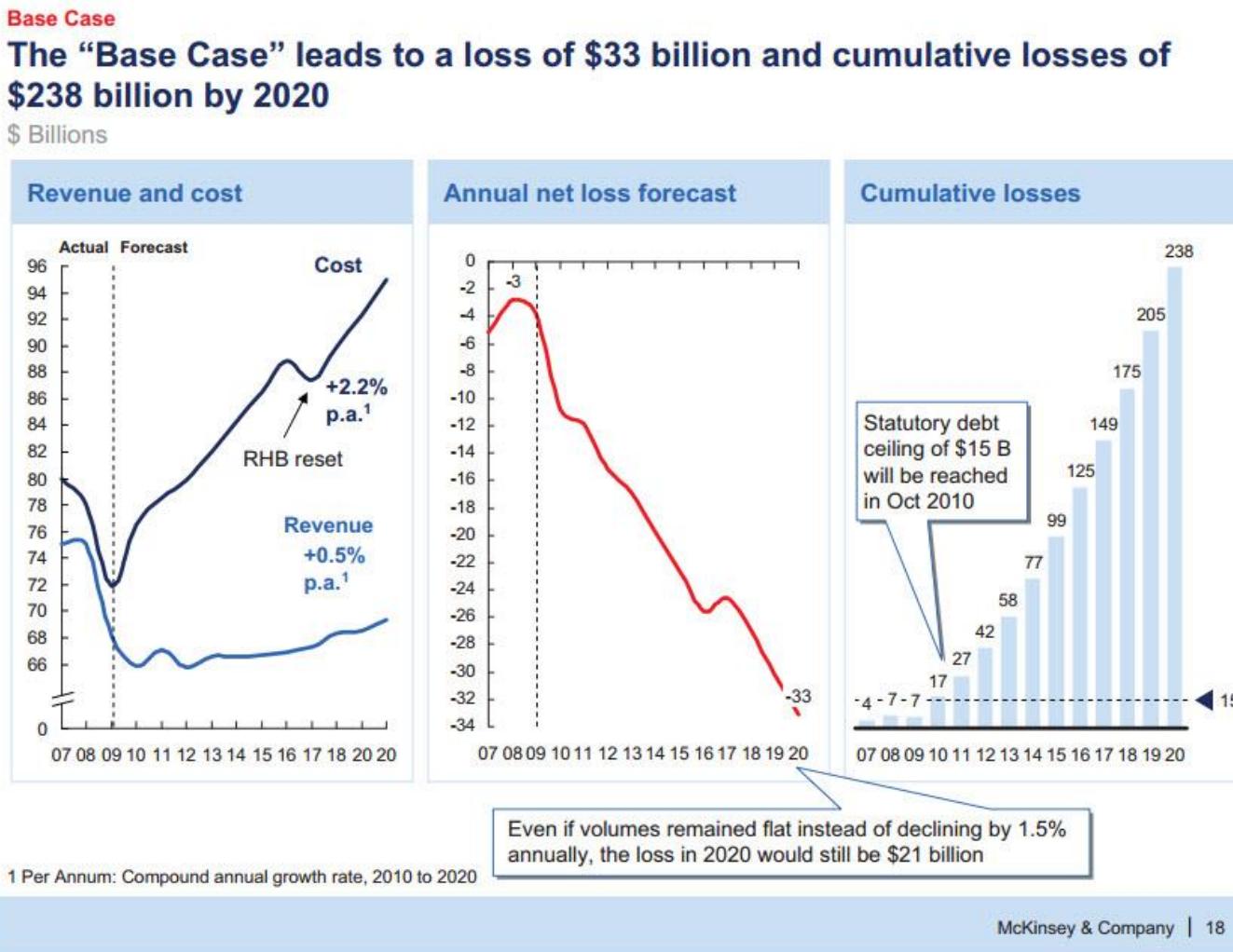
Or adding a “kicker box” at the bottom with the main point of the slide

Currently, Location A has 20% higher cost than Location B. If the contract can be renegotiated, it can save \$450,000 annually in leasing costs

# Charts which are easy to understand

In this example, slides tend to be busier than it should be, but their charts are at least simple and easy to understand.

You see that they are clearly labeled and the trend lines are obvious. Revenue is flat. Costs are going up. Profits are going down. Cumulative losses are going up. Unequivocal. Direct.



# A clear case for change

It's key to make it in-your-face clear why action is needed.

In this example, McKinsey shows that \$18 billion can be saved if these actions are taken, or \$123 billion total. Billion with a B.

## Actions within Postal Service control

USPS will continue to take aggressive action to drive revenue and control costs

### Net annual income benefit (2020)

- |   |                                    |         |
|---|------------------------------------|---------|
| 1 | Product and service actions        | ~\$2B   |
| 2 | Productivity improvements          | ~\$10B  |
| 3 | Workforce flexibility improvements | ~\$0.5B |
| 4 | Purchasing savings                 | ~\$0.5B |

Avoided interest due to reduced debt

~\$5B

Total

~\$18B

Cumulative impact 2010-2020

~\$123B

McKinsey & Company | 23

# Storytelling & Audience



# Story and Storytelling

- Story is defined as an account or recital of an event or a series of events or incidents that is either true or fictitious.
- Storytelling is defined as, "relating a tale to one or more listeners through voice and gesture" (National Council of Teachers of English, 1992, p. 1



A story can put  
your whole brain  
to work

# THE POWER OF STORYTELLING

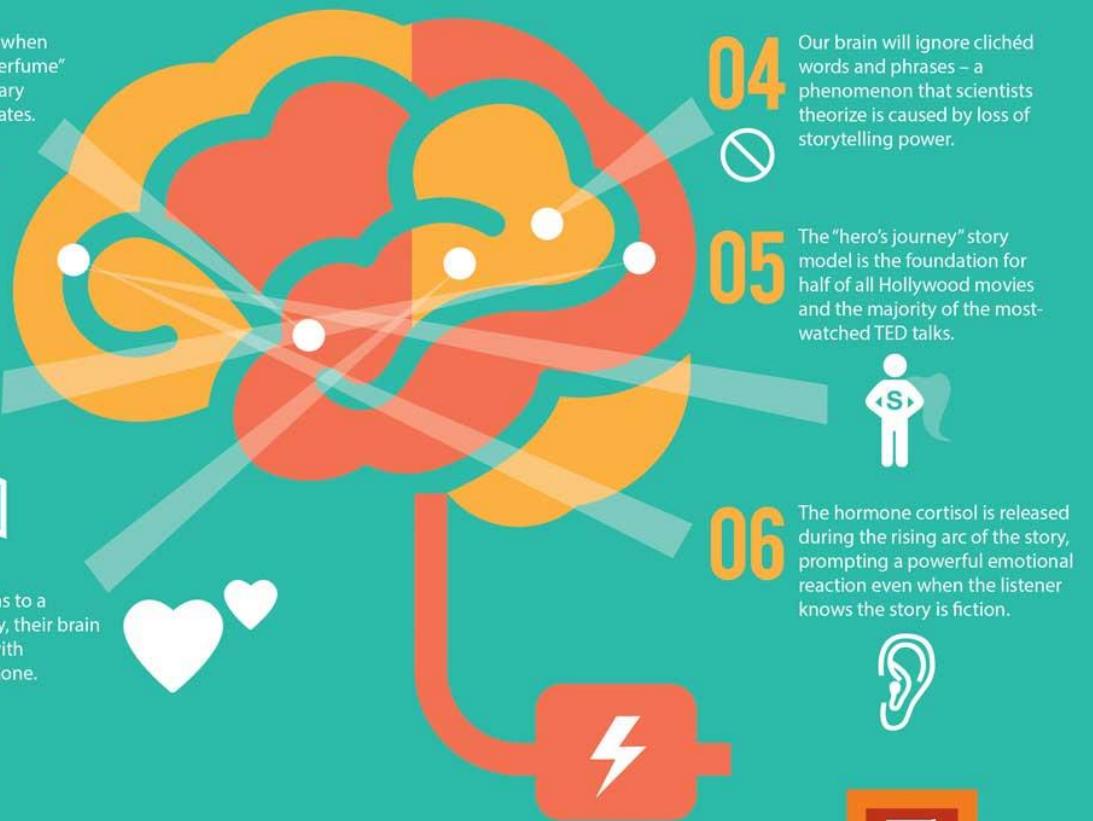
**01** MRI scans reveal that when we read words like "perfume" and "coffee", our primary olfactory cortex activates.



**02** Individuals who frequently read fiction seem to better understand other people and display greater empathy.



**03** When someone listens to a character-driven story, their brain immediately floods with oxytocin, a love hormone.



echostories.com

Words can link to human sensory.

1. There are activities in brain when we read words like "perfume" and "coffee"
2. People who frequently read fiction seem to have more empathy on other people.
3. When we listens to character-driven story, our brain floods with a love hormone.
4. Our brain will ignore cliched words.
5. The hero's journey story model is the most popular story structure.
6. The mood rising episode of the story prompt a powerful emotional reaction.

# What makes presentation annoying

- The main point was obscured by lots of **irrelevant detail**
- Not enough information was provided to support the main point
- Went through the presentation **too slowly**
- Contained **too much material to absorb** before the next slide was presented
- Read **word-for-word** from notes or from the slides themselves

# Who is your audience?



# Audience Analysis



## Demographic

- Age
- Gender
- Position
- Background
- Education
- Religious



## Situational

- Audience Size
- Physical setting
- Length of presentation



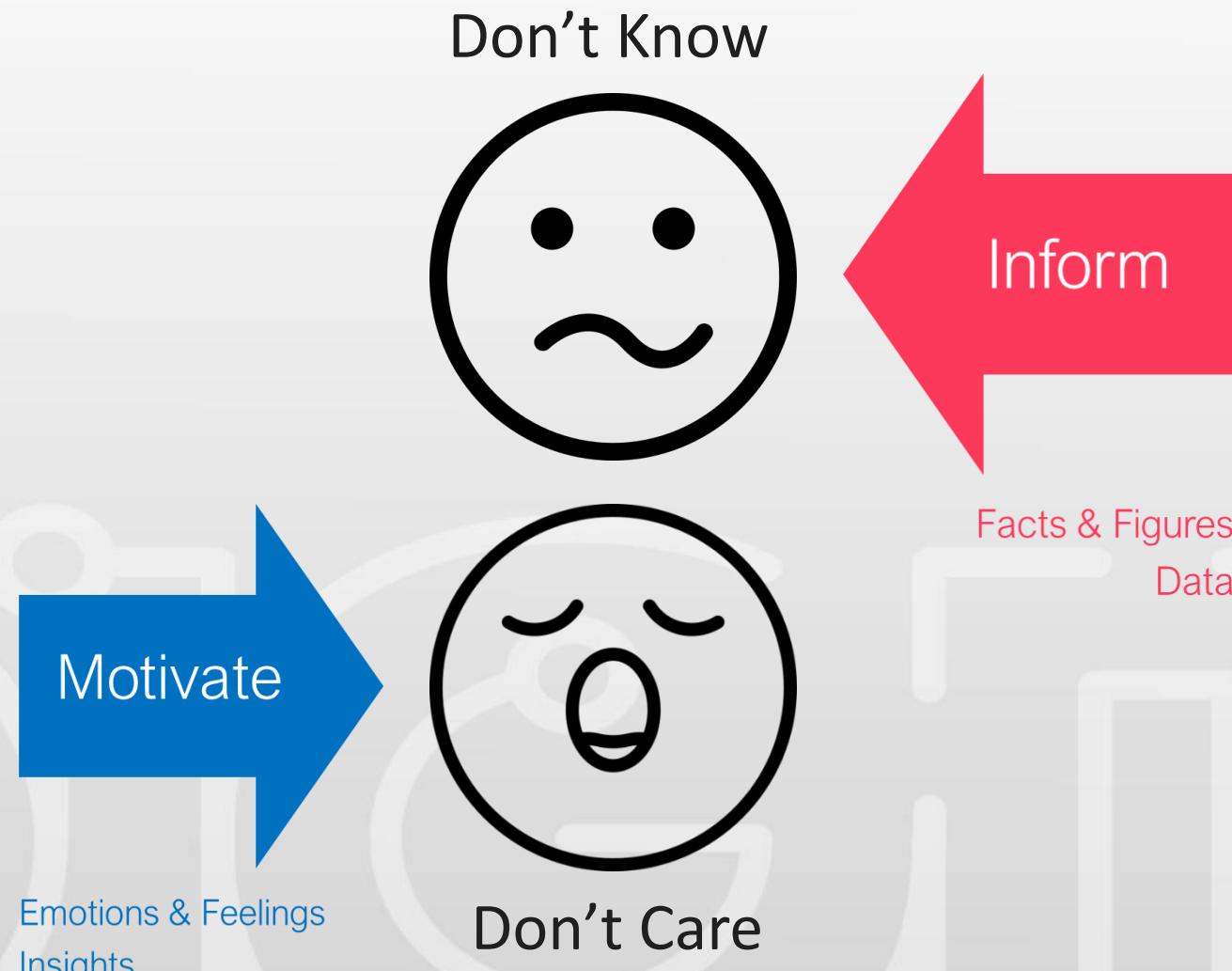
## Nonverbal

- Eyes contact
- Facial Expression
- Restless Movement
- Verbal Responsiveness

PRE-STAGE

ON-STAGE

# How to win audience?



# Audience Empathy Matrix

	Interest	Not Interest
Know	 Challenge them	 Surprise them
Don't Know	 Enlighten them	 Convince them

Logic  
Order



Art  
Emotional

# Structuring

# Structures of a story with data

1

LINEAR  
STORY

2

MULTIPLE  
SUB-STORIES

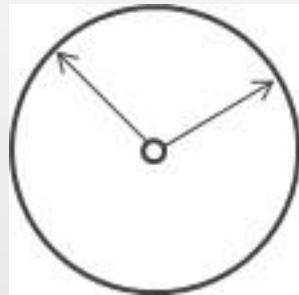
3

COMPONENT-  
BASED STORY

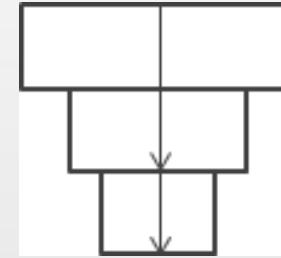
# Structures of a story with data

1

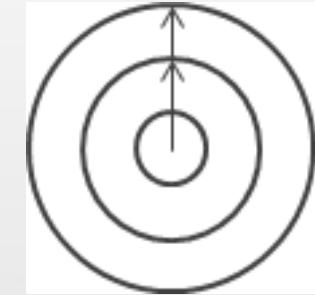
LINEAR  
STORY



Change  
Over Time

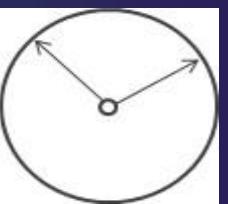


Drill Down



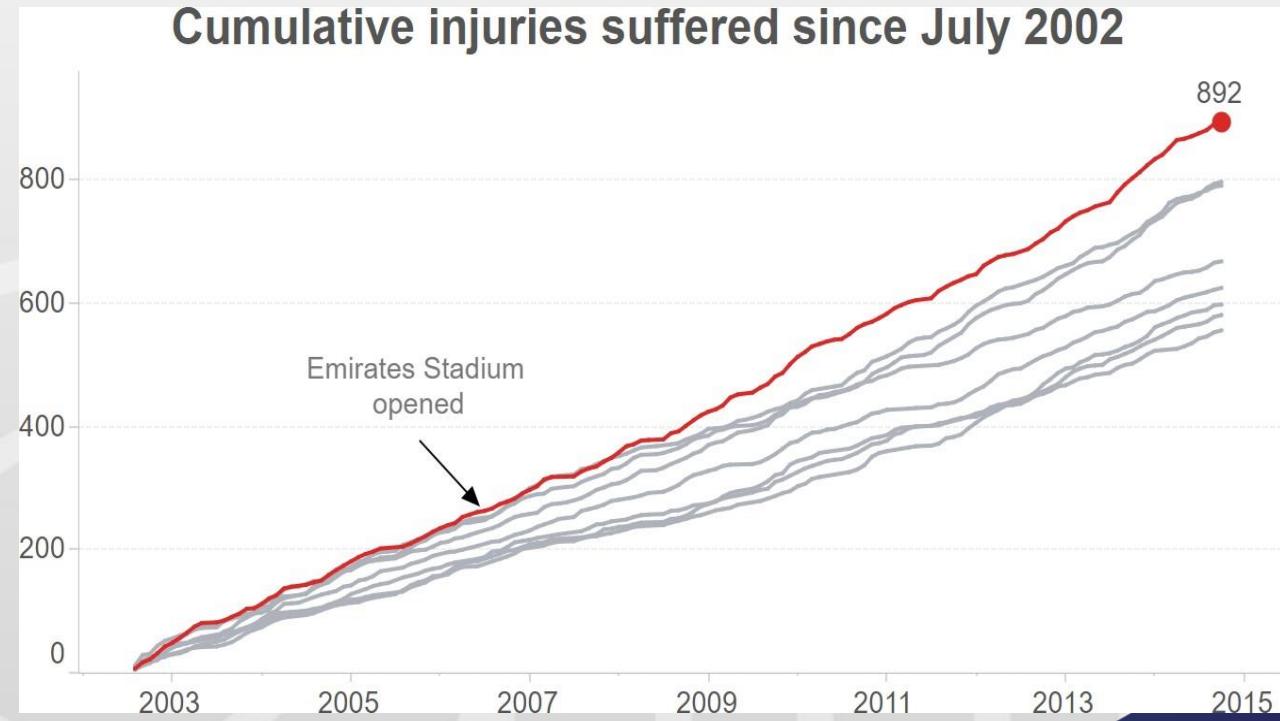
Zoom Out

# Structures of a story with data

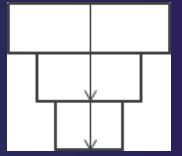


Change

- What it does: Uses a chronology to illustrate a trend.
- Discussions it starts: Why did this happen, or why does it keep happening?  
What can we do prevent or make this happen?
- Examples:
  - Trend analysis
  - Period-on-period analysis
  - Seasonal analysis
  - Growth analysis



# Structures of a story with data

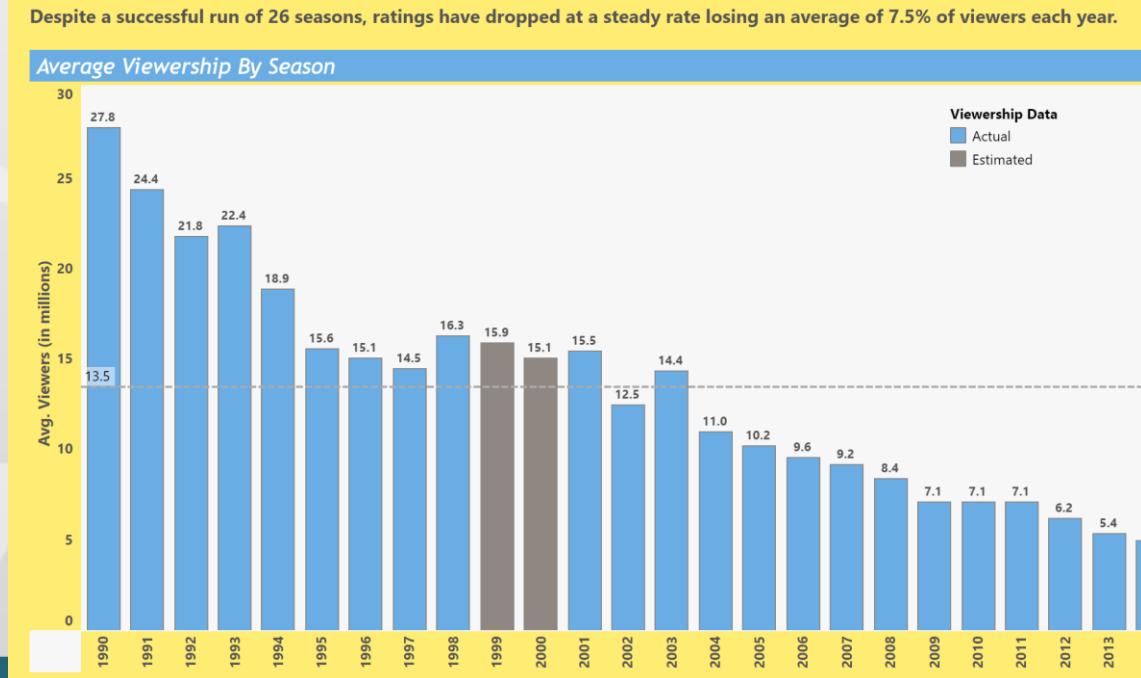
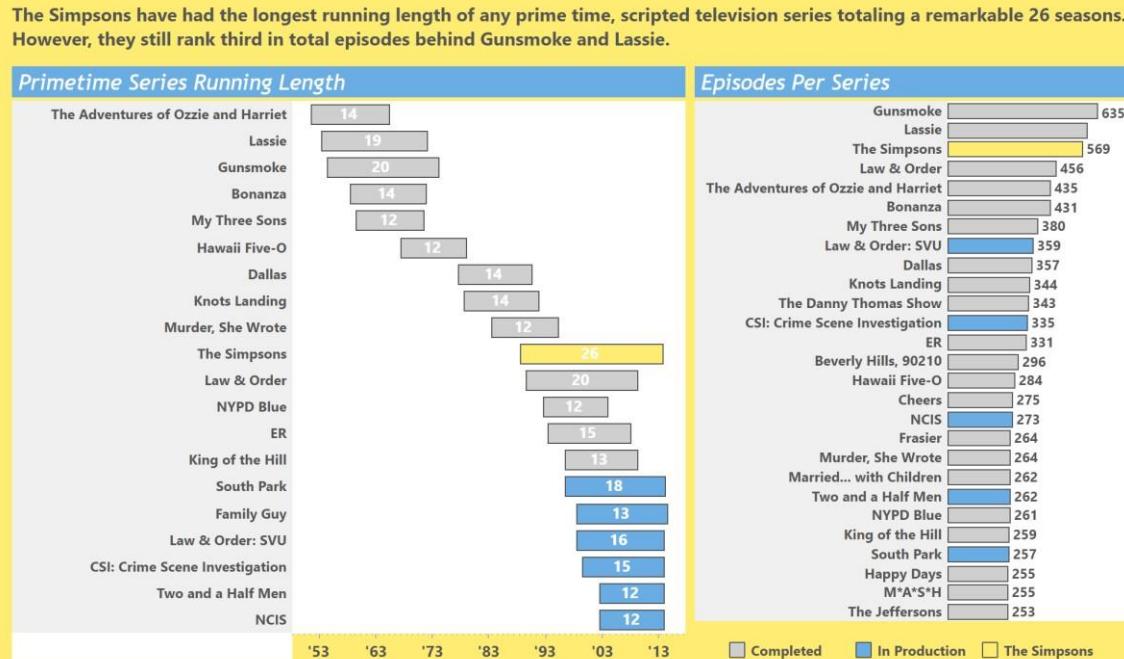


- **What it does:** Sets context so that your audience better understands what's going on in a particular category.
- **Discussions it starts:** Why is this person, place or thing different? How does the performance of this person, place, or thing compare?
- **Examples:**

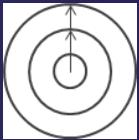
Drill Down

## The Simpsons

Its ratings



# Structures of a story with data



Zoom Out

- What it does: Describes how something your audience cares about relates to the bigger picture.

- Discussion it starts:

How does something you care about compare to the bigger picture?

What effect does one area have on the bigger picture?

- Example:

## Cyclists and Bike Lanes



## Cyclists and Traffic Control

I observed 4 intersections with various traffic controls like 2-way stop signs, 4-way stop signs, traffic light intersections and roundabouts. I chose ones that had high volumes of crashes involving cyclists from 2009 to 2013.

The size of the circles over each intersection reflects the percentage of rules disobeyed for the specific traffic control. For example, failing to stop at a stop sign would be deemed disobeying.



36%

of cyclists disobeyed a traffic control but it varied greatly depending on the type of traffic control.



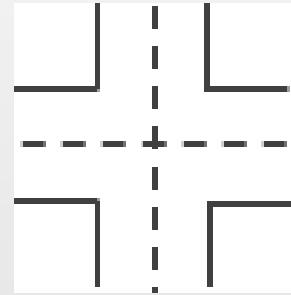
# Structures of a story with data

2

MULTIPLE  
SUB-STORIES

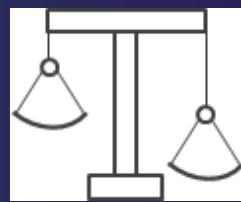


Contrast

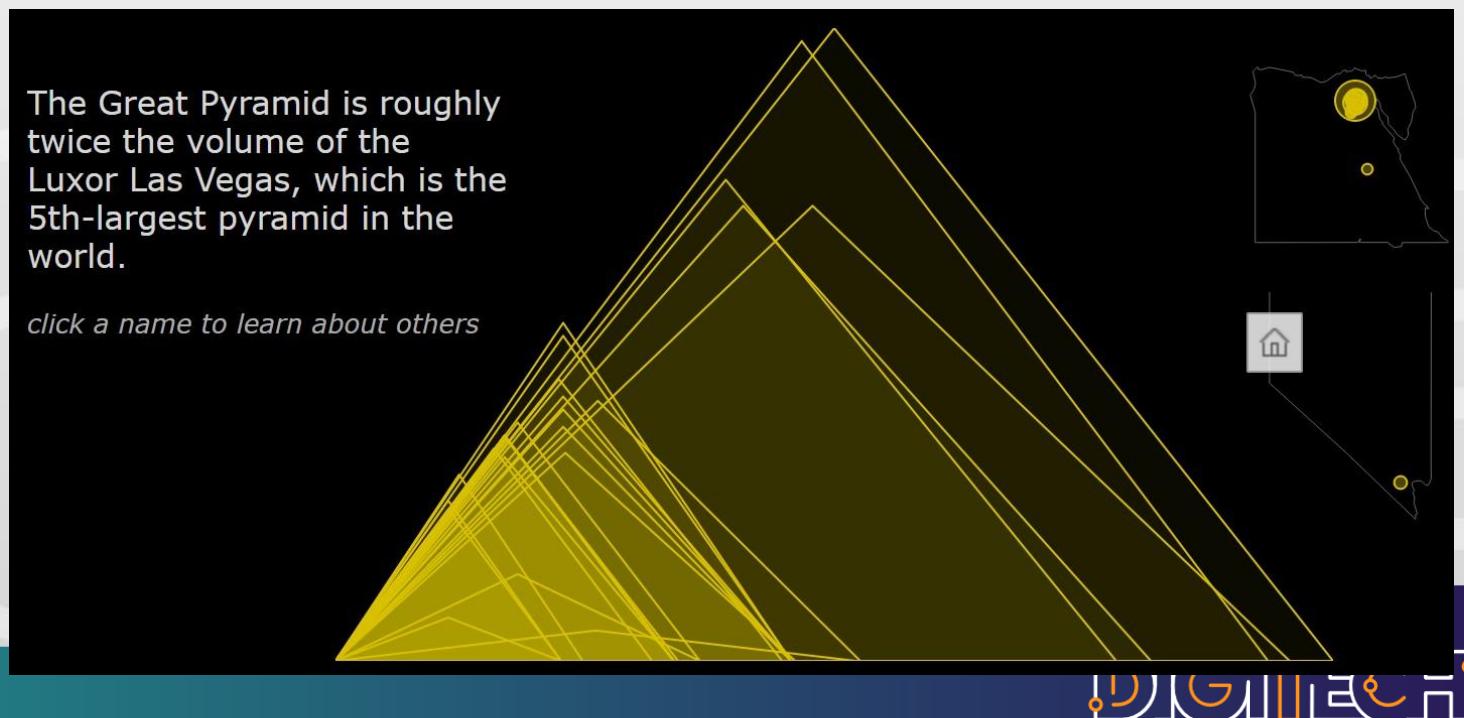
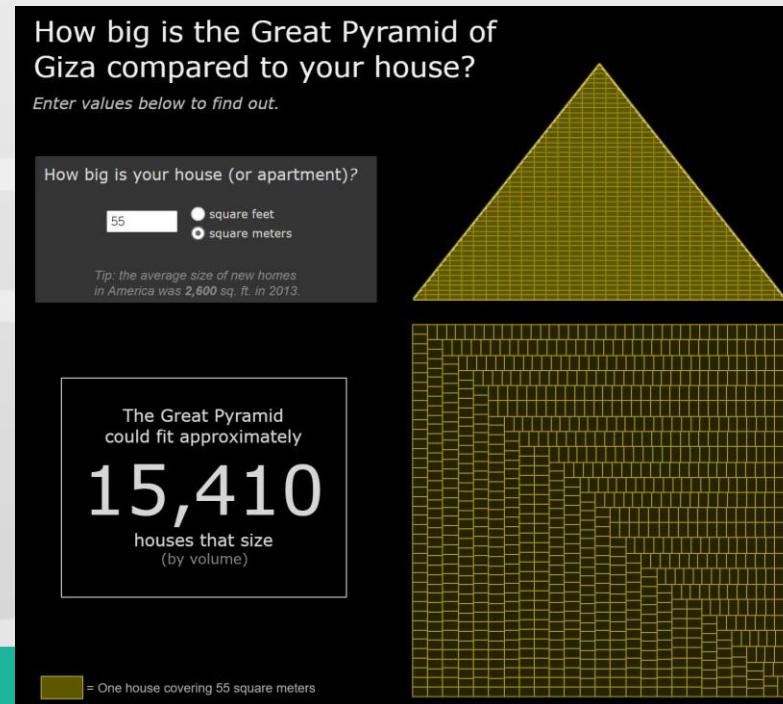


Intersections

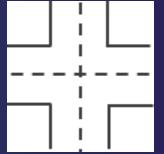
# Structures of a story with data



- **What it does:** Shows how two or more subjects differ.
- **Discussions it starts:**
  - Why are these items different?
  - How can we make A perform like B?
  - Which area should we focus on and which area is doing fine?
- **Example:**



# Structures of a story with data



Intersections

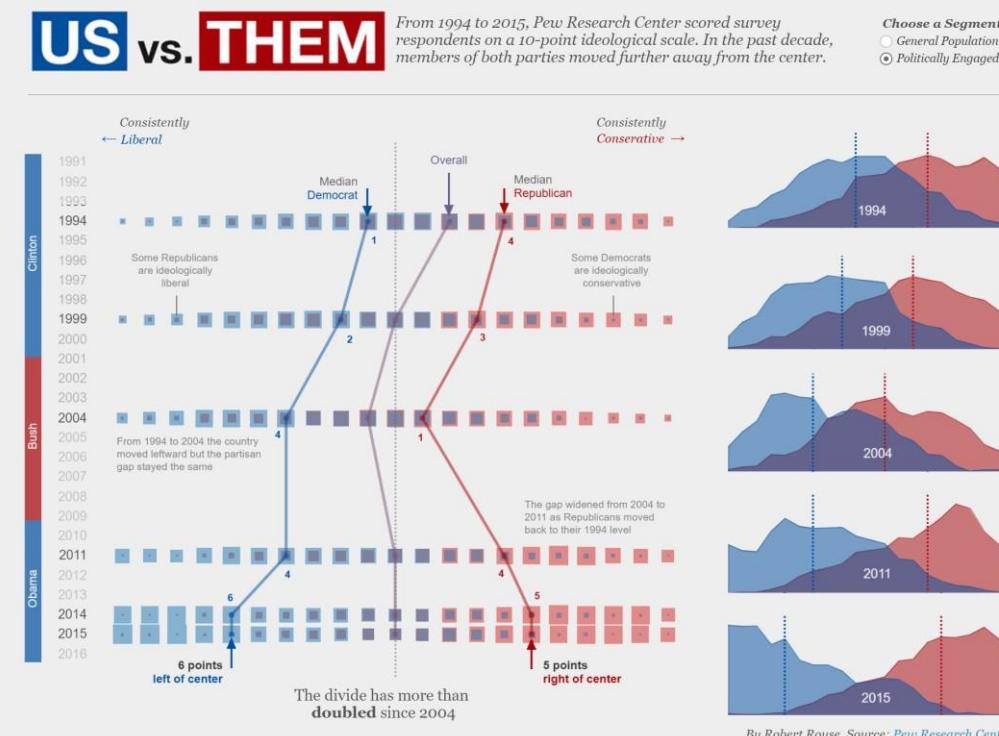
- What it does: Highlights important shifts when one category overtakes another.
- Discussions it starts:

What causes these shifts?

Are these shifts good or bad?

How do these shifts affect other aspects of our plan?

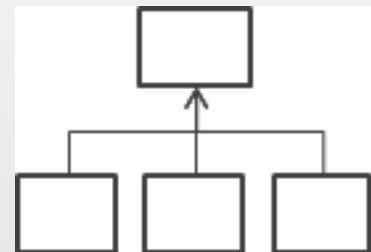
- Example:



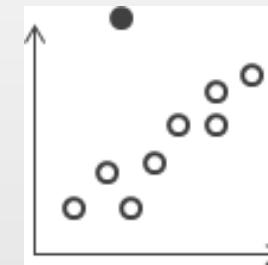
# Structures of a story with data

3

COMPONENT-  
BASED STORY

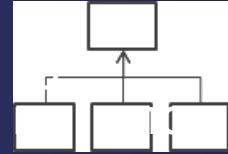


Factors



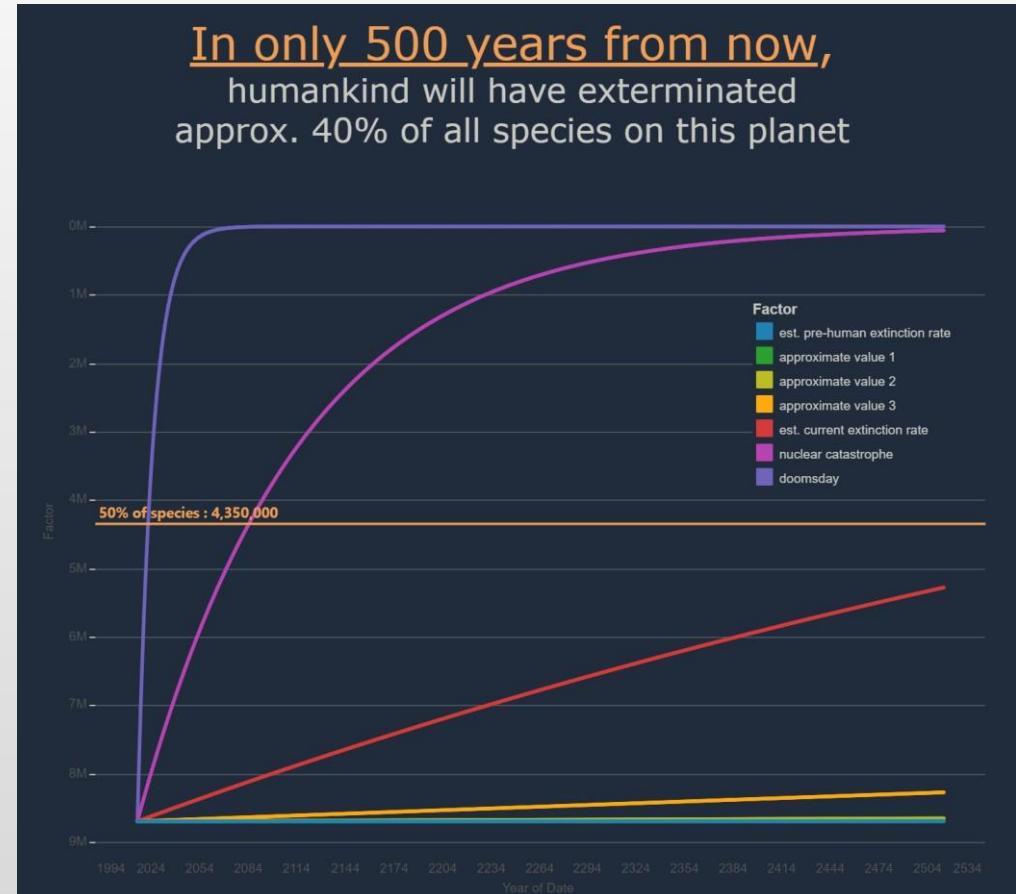
Outliers

# Structures of a story with data

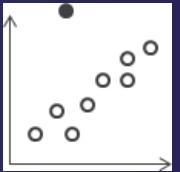


- **What it does:** Explains a subject by dividing it into types or categories.
- **Discussions it starts:**
  - Is there a particular category we should focus on more?
  - How much do these items affect the metric we care about?
- **Example**

Factors

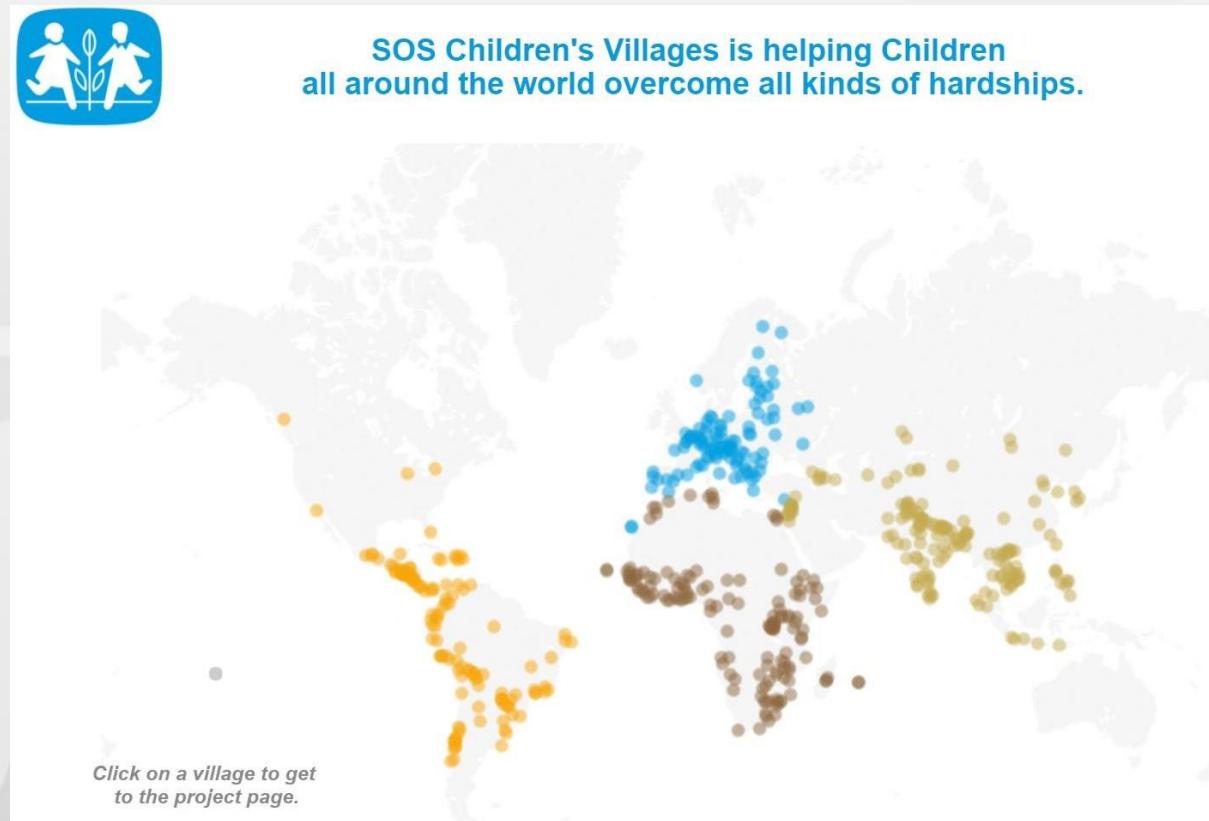


# Structures of a story with data



Outliers

- What it does: Shows anomalies or where things are exceptionally different.
- Discussions it starts: Why is this item different?
- Example:



# Connecting

# Plan your storytelling

- 1 List out what you want to tell to your audience
- 2 List out what your audience want to know or already knew
- 3 Prioritize key communication points /  
lay out dependencies of key communication points
- 4 Divide your story into sections
- 5 Design introduction and key message of each section
- 6 Design the linkage and flow of the story

# Touching

# 5 Technique to make stories more emotionally appealing



Personal  
stories



Stories  
about  
other  
people



Stories  
about  
brand  
success



Give me  
one  
character  
I can  
root for



Give  
them  
something  
new