

# Practical 4

## Context + Narrative



# Practical 4



<b><u>Before Class</u></b>	<b>Concepts</b>	Data Storytelling
<b><u>During Class</u></b>	<b>Hands-on</b>	Recap Intro to Data Storytelling Context Narrative
<b><u>After Class</u></b>	<b>Hands-on</b>	<i>Revise today's class with LMS: Apr/Oct – Week X (...)</i> <i>Go through Additional Resources slides</i> <ul style="list-style-type: none"><li>- <i>Read on the Science of Storytelling</i></li><li>- <i>Watch first 10 min of Brent Dykes 's video</i></li><li>- <i>Find the Hidden Message</i></li><li>- <i>Do more practice on Big Idea, Storyboarding and Narrative Framework (University Election)</i></li><li>- <i>Read on how to transform data from story</i></li></ul>



# Why Data Storytelling



# Intro

- **Do you remember** which was the **first story** someone has ever told you **when you were a child?**
  - What is it about the story that made such an impression on you?
  - **Pause to recall** for a moment . . . **How do you feel** as you are reminiscing about it?
  - Humans are **Storytelling Creatures**
- 

# It Is In Our Nature To Need Stories

After nourishment, shelter, and companionship,  
stories are the things we need the most in the world

- Philip Pullman, Author

By Jacob Kastrenakes | @jake\_k | Sep 25, 2017, 12:44pm EDT

f t SHARE

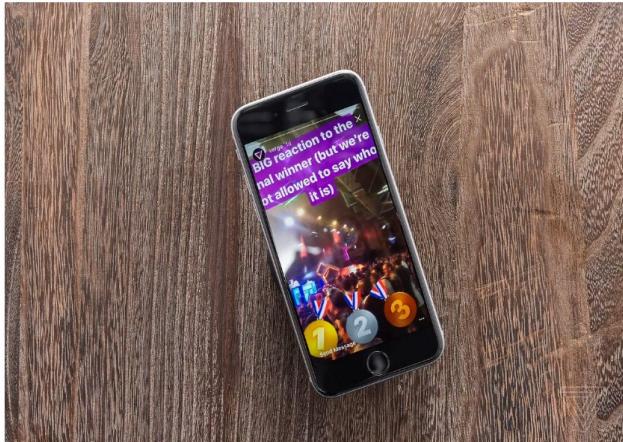


Photo by Amelia Holowaty Krales / The Verge

**Instagram added 200 million daily users** the year after launching Stories.

Source: <https://www.apa.org/monitor/apr06/latest>  
Source: <https://visme.co/blog/7-storytelling-techniques-used-by-the-most-inspiring-ted-presenters/>  
Source: <https://theverge.com/2017/9/25/16361356/instagram-500-million-daily-active-users>

7 Storytelling Techniques Used by the Most Inspiring TED Presenters

The cover image shows the title '7 Storytelling Techniques Used by the Most Inspiring TED Presenters' in white text against a black background. The TED logo is visible at the top left. Below the title, there's a small profile picture of a woman and the text 'Written by: Nayomi Chibana'. At the bottom right, there's a small button labeled 'Sign up'.

A couple of years ago, as a participant of a master's program in Denmark, I met a fellow journalist from Chile who gave me a lesson on storytelling that I will never forget.

I was in class, half-listening to the end of a monotonous PowerPoint presentation on the history of media, when the next presenter on the list—the Chilean journalist—was called to go up to the podium.

His name was Enrique Núñez, one of the quietest students in the class. All I knew about him was that he always sat in the very front row and unlike the other students, paid the utmost attention to every word.

COVER STORY

## Have you heard the latest?

Gossip is more than just idle chatter, according to recent research. It helps us navigate our complex social world.

By Lea Winerman

Monitor Staff

April 2006, Vol 37, No. 4

Print version: page 56

**65% of our daily conversations are essentially stories about people** (Dunbar 2004)



# From Data Visualization to Data Storytelling

- Resurgence in power of data visualisation
- Gold rush of more diverse, dynamic data
- New tools available



Data Visualisation



Data Storytelling

shutterstock • 692790505





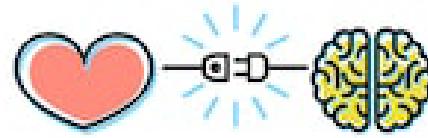
# Why Data Storytelling

## The Last Mile



Data storytelling weaves data and visualizations into a **narrative** tailored to specific **audiences**

## Emotion and Engagement



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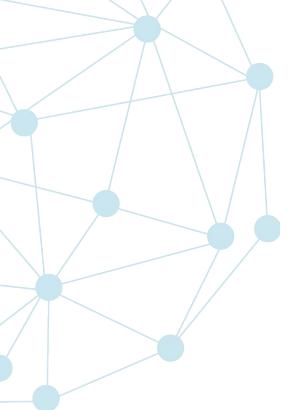
It is the **context** around the data that provides value and **engages** the audience.

## Decision Making



The aim is to convey a set of insights that is **actionable** to the audience.

# What is Data Storytelling



## Misconception 1: Data Storytelling is synonymous with Data Visualisation

For many people, the prevailing perspective is that data storytelling is synonymous with data visualisation.

Why is that the case?

Because charts and visualisation tools have received much of the attention, so much so that the other aspects of data storytelling have been sidelined.





# Misconception 1: Data Storytelling is synonymous with Data Visualisation

## *Truth : Data Storytelling is more than just Data Visualisation*

According to Brent Dykes, the author of *Effective Data Storytelling*, we should not just focus on the narrow visualisation perspective.

We should take a more **balanced perspective** where data, narrative and visuals all come into play.

### What is Data Storytelling?

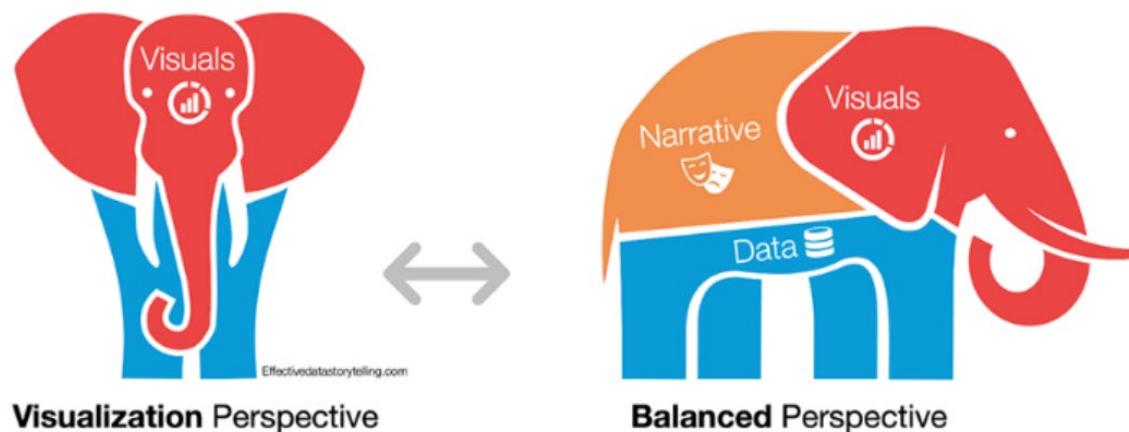


Image taken from <https://www.effectivedatastorytelling.com/post/elephant-in-the-room-data-storytelling-is-more-than-just-data-visualization>



## **Misconception 2(a) : "Every data chart tells a story"**

According to Brent Dykes, the author of *Effective Data Storytelling*,  
When you share insights from one chart, you are only sharing one piece of puzzle.

## **Misconception 2(b) :**

### **Data stories are simply a collection of interesting but loosely related observations.**

According to Brent Dykes, the author of *Effective Data Storytelling*,  
A few pieces of charts tied loosely together do not form a compelling story.  
They are like a mixture of puzzle pieces that may not fit together.

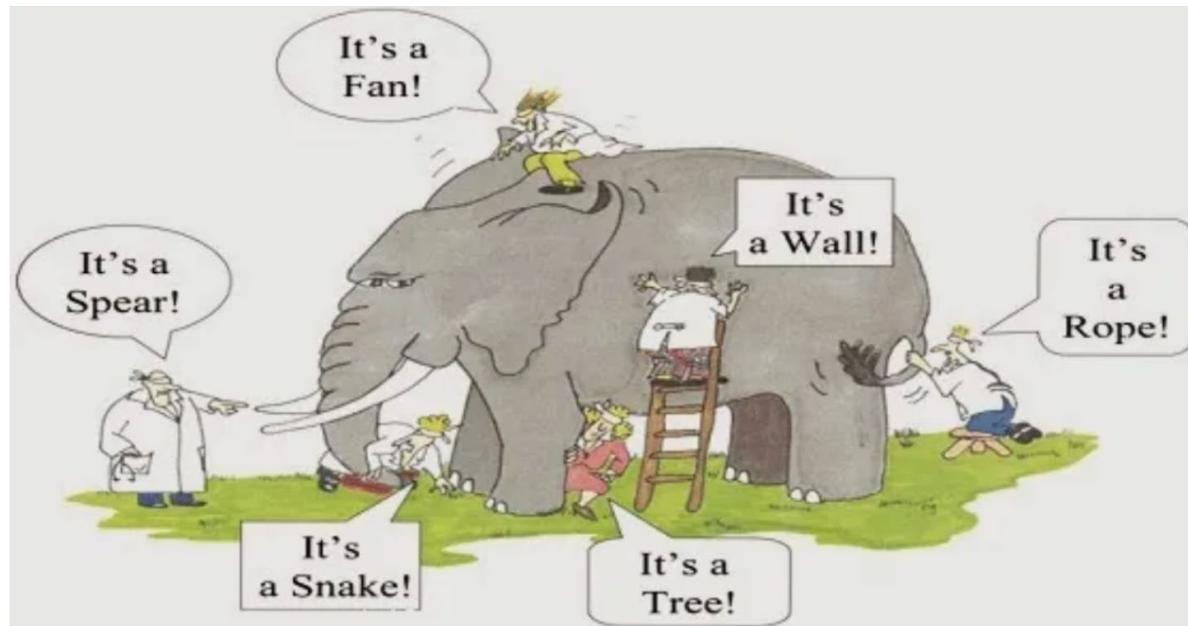


# Misconception 2(c) : Dashboards tell stories.

According to Brent Dykes, the author of *Effective Data Storytelling*,

Even if your dashboards have filters for audience to self-service, they may interact with **different aspects** of your dashboard and takeaway different things.

Therefore, dashboards **do not guarantee a targeted story**.

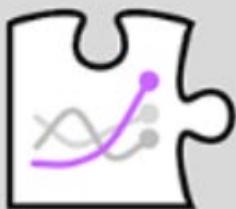


# Misconception 2(a) OR (b) OR (c)

**Truth :**

**To be a Data Story, the puzzle pieces must combine together as part of an enlightening narrative.**

Not A  
Data Story



Also, Not A  
Data Story



**A Data Story**



[Effectivedatastorytelling.com](http://Effectivedatastorytelling.com)

Image taken from <https://www.effectivedatastorytelling.com/post/elephant-in-the-room-data-storytelling-is-more-than-just-data-visualization>



# What is Data Storytelling?

Data storytelling is a structured approach for communicating data insights, and it involves a combination of three key elements: *data*, *visuals*, and *narrative*.

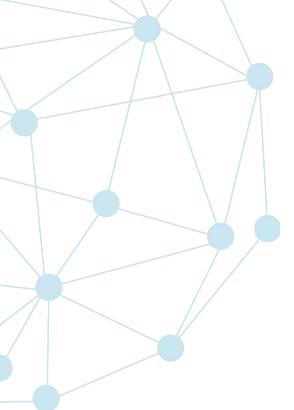
When you combine the right visuals and narrative with the right data, you have a data story that can influence and drive **change**.



Image taken from <https://www.forbes.com/sites/brentdykes/2016/03/31/data-storytelling-the-essential-data-science-skill-everyone-needs/amp/>

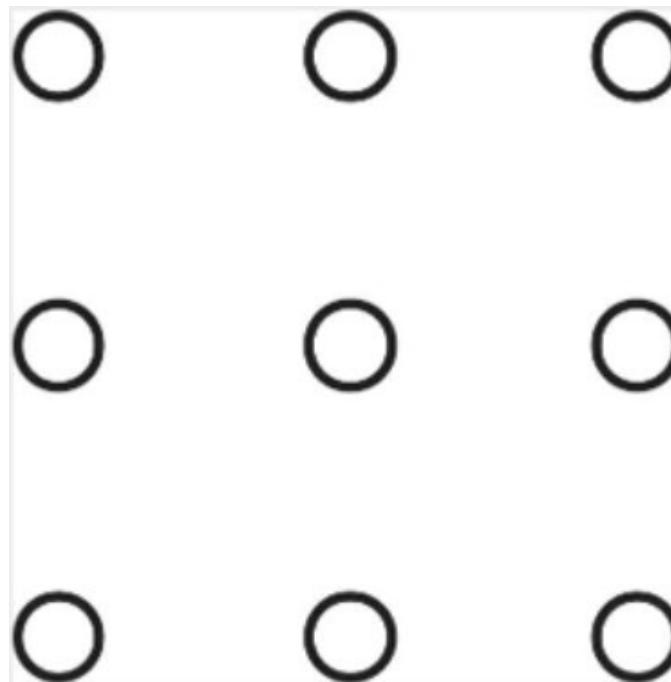
# Data Storytelling – Context - Explore



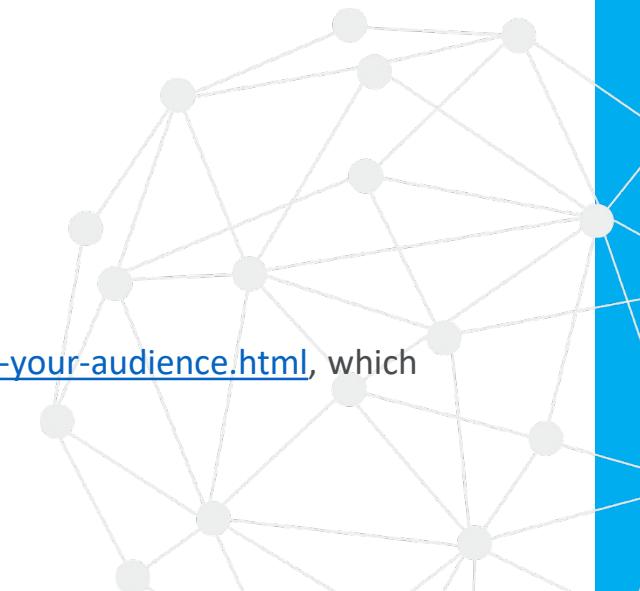


# Q1 : Nine-Dot Problem

Connect the dots by drawing four straight lines, making sure not to lift your pen from the paper or retrace lines.



Adapted from [https://saylordotorg.github.io/text\\_business-communication-for-success/s07-understanding-your-audience.html](https://saylordotorg.github.io/text_business-communication-for-success/s07-understanding-your-audience.html), which in turn is adapted from McLean, S. (2003). *The basics of speech communication*. Boston, MA: Allyn & Bacon



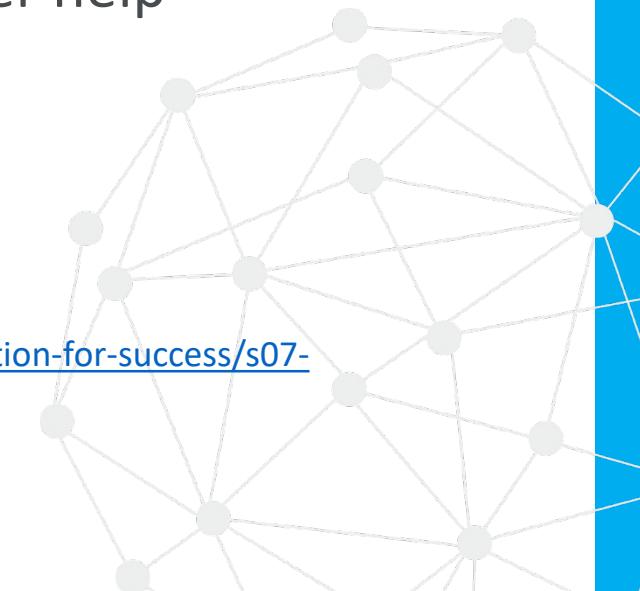


# Q1 : Nine-Dot Problem - Takeaway

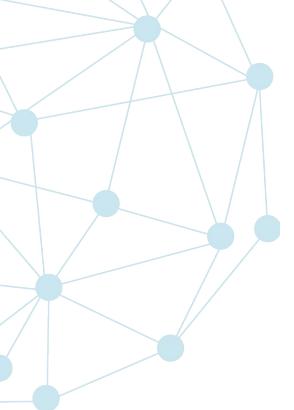
This applies to idea and concepts as well. Your perspective can influence your view of the overall idea.

**What does that mean when presenting our data?**

Our audience may come with their own pre-conceived perspective, which may hinder their ability to "get" the message you are trying to get across. Therefore, it is important to understand their context so that we can better help them **connect the dots**.

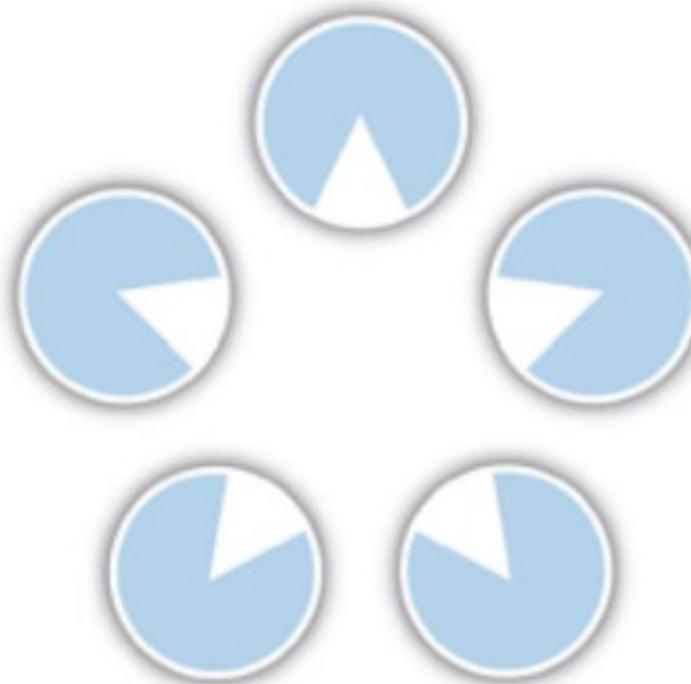


The above is taken and adapted from this article: [https://saylordotorg.github.io/text\\_business-communication-for-success/s07-understanding-your-audience.html](https://saylordotorg.github.io/text_business-communication-for-success/s07-understanding-your-audience.html)



## Q2 : What Do You See?

Write down what you see in this picture.



Short Answer

Image taken from [https://saylordotorg.github.io/text\\_business-communication-for-success/s07-understanding-your-audience.html](https://saylordotorg.github.io/text_business-communication-for-success/s07-understanding-your-audience.html)





## Q2 : What do you see? - Takeaway

Sometimes we “fill in the blanks” without even being aware of it.

When we speak on a topic and fail to clearly articulate a point, we leave a “hole” in our presentation that the audience may or may not be aware of, but will predictably fill in the gaps. But they may not always guess correctly.

If your goal is to communicate your message to the audience, then you probably don’t want a “hole” to interrupt, distract, or create a barrier that leads to misinterpretation.



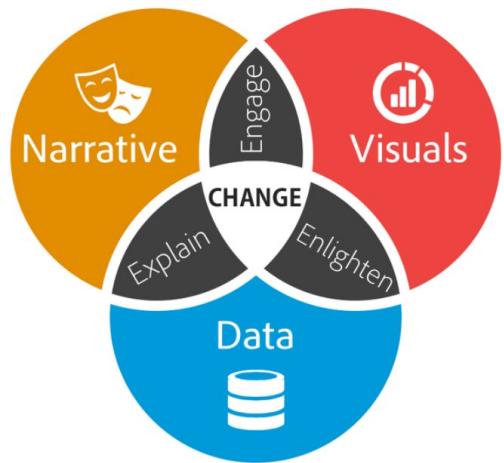
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# Data Storytelling

## Understanding the Context



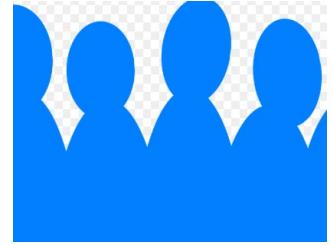
# Who is Your Audience?



**Getting the message**

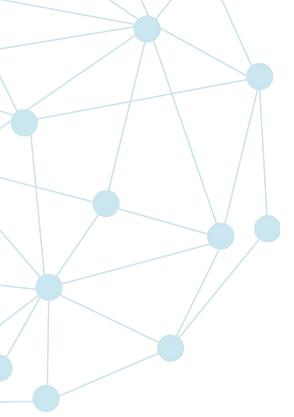


**Across the Last Mile / Great Divide**



**To Your Audiences**





# What Questions to Ask about Your Audience?

**WHO** are your audience?

**WHAT** biases do they have?

**WHAT** data will be available that will help make my point?

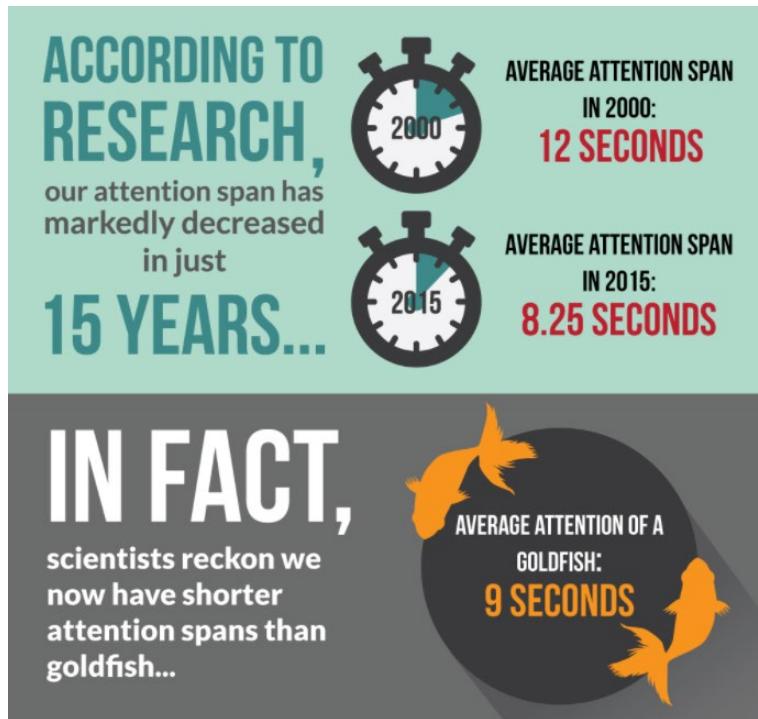
**WHAT** would a successful outcome look like?

**WHAT** do you need your audience to know or do?



# #TBH (To Be Honest)

- How many times have you checked your phone since we started class? 😊



# Goldfish vs Elephants

## WE'RE EASILY DISTRACTED...

An office worker, on average, will check their email inbox

**30 TIMES**  
every hour.



The average user picks up their phone more than

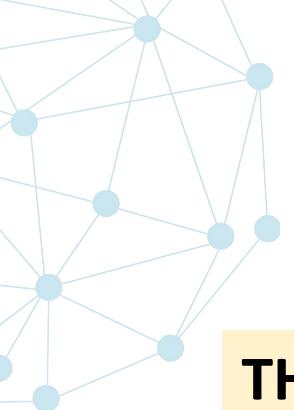
**1,500**

times a week – taking up an average of 3 hours, 16 minutes a day.



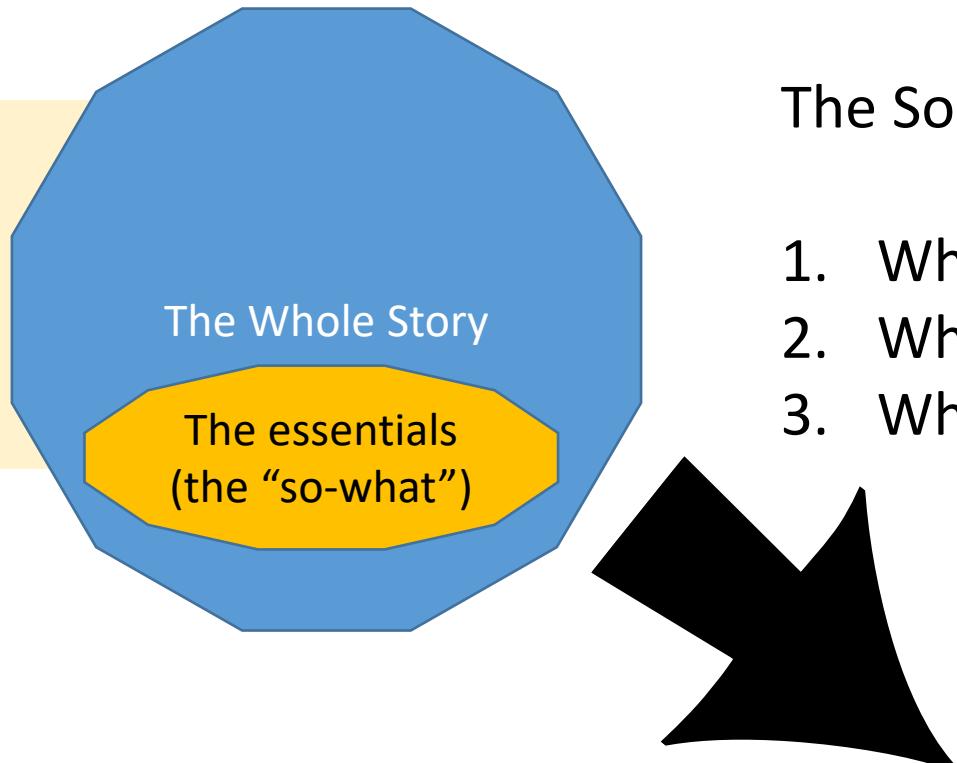
## TOP TIPS

- ◆ Keep your messaging short and sweet.
- ◆ Appeal to consumer desires – tell stories.
- ◆ Use rich media like video – and make the first 8 seconds attention-grabbing



# If You Only Have 3-Minutes ...

THREE  
MINUTE  
STORY



The So-what Test (Waisberg 2016)

1. Why should your audience **care**?
2. What should they **do** about it?
3. What's the **potential business impact**?



The Big Idea

Boil it down to one sentence

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# Data Storytelling

## What's the Big Idea?

# What's the Big Idea - Template

From the book *Storytelling with Data* by Cole Nussbaumer Knaflic.

## Who's the Audience?

- List primary group or individuals
- If narrow down to one, who?
- What do they care about?


## What's at stake?

- What are the benefits?
- What are the risks?
- What's the urgency?
- Action needed from audience


## What's the Big Idea

- In one sentence

--

The first two parts are essentially the "So-what" Test, and the last part is for developing the Big Idea.



# Data Storytelling

## Example on Big Idea

# Group Storyboarding Activity : Fundraising for Pet Adoption



- You are an executive in a pet adoption organisation. The current adoption rate at your pet shelter is less than ideal. The management hopes to improve the fundraising effort to make the company operation more sustainable.
- You've conducted research on your own pet shelter as well as those of your competitors and have found that improving the adoption rate by 20% this year will help to increase the fundraising amount.
- Traditionally, events have been held in outdoor spaces in your community. However, last month's event was different. Due to poor weather, the event was relocated indoors to a local pet supply retailer. Surprisingly, after the event, you observed something interesting: nearly twice as many pets were adopted compared to previous months.
- You'd like to conduct a pilot program over the next three months to see if the results help confirm your beliefs. To implement this pilot program, you'll need additional support from the pet shelter's marketing team to publicize the events. You've estimated the monthly costs to be \$500 for printing and three hours of marketing planning time. You want to ask the marketing team led by Joan Harper to approve the pilot program at next month's meeting.

# Big Idea : Fundraising for Pet Adoption



## Who's the Audience?

List primary group or individuals  
If narrow down to one, who?  
What do they care about?


## What's at stake?

What are the benefits?  
What are the risks?  
What's the urgency?  
Action needed from audience


## What's the Big Idea

In one sentence

--



# Hands On

## Context and Narrative



## P04 Context: Elaborate

- On LMS, head to “Activity 1: Context + Narrative” > “Practical Questions”. Download practical sheets and datasets.
  - Here, you are given a scenario of a clothing retailer. Treat the scenario as your 3-min story. Go through the "So-what" test using the given template, then come up with one single sentence for your Big Idea.
  - Aim : Understand the context of your audience, clarify your thoughts, and come up with the Big Idea.
- 

# Scenario : Clothing Retailer



- Imagine you work at a national clothing retailer and have conducted a **survey** to gather feedback from customers about their **back-to-school shopping experiences**. After analyzing the data, you discovered that while your company performs **well in certain areas**, there are **inconsistencies** in service across different stores.
- As you and your team delved deeper into the analysis of the survey data, you discovered valuable insights that shed light on the **root causes** of the service inconsistencies across stores. Some factors contributing to this issue included **variations in employee training**, differences in **store management approaches**, and **inadequate communication channels** within the company.
- Recognizing the significance of addressing these underlying factors, your team began brainstorming potential courses of action. The discussions revolved around **strategies** to ensure a **consistent service** experience for customers regardless of which store they visited. Alongside the recommendation for sales associate **training**, other ideas were explored, such as implementing **standardized operating procedures**, fostering **inter-store communication** and collaboration, and establishing a **central feedback system** to capture customer experiences and concerns.
- Your team concluded that sales associate **training** held the most promise for **achieving the desired outcome**. The training program aimed to equip sales associates with the necessary skills, knowledge, and mindset to deliver consistent and exceptional service. It would encompass a range of topics, including effective communication techniques, conflict resolution, product knowledge, and understanding customer needs.
- In order to ensure the long-term success and sustainability of the training program, your team placed significant emphasis on the need for ongoing support and reinforcement. This included **securing** the necessary **funding** to execute the **training program** effectively. With this in mind, you are eager to approach your **management** and seek their **support** for implementing this training initiative.



## Let's Practice: Clothing Retailer

- a) Let us start with the big idea by considering the audience. Who are they? What might motivate them? What would keep them up at night? What action do you need them to take?
  
- b) With the audience in mind, create a storyboard. You can use the sticky notes in the power point slides provided to do this.
  
- c) Next, let's think about the narrative framework (Freytag's Pyramid). What tension exists for the audience? What does your analysis suggest that resolves this tension? What pieces of content will you need to provide your audience?

Part (b) and (c) is for the next section on Narrative

# Big Idea : Clothing Retailer



## Who's the Audience?

List primary group or individuals  
If narrow down to one, who?  
What do they care about?


## What's at stake?

What are the benefits?  
What are the risks?  
What's the urgency?  
Action needed from audience


## What's the Big Idea

In one sentence

--



# Takeaway

- This step allows you to think through the situation and understand the road map of your audience as closely as possibly in order to communicate from a common ground.
  - It takes the "so-what" of your overall communication and boils it down to a **single sentence**. If you do not skip this step, you will find that your overall communication is much clearer and sharper.
- 

# Data Storytelling

## Narrative Example



# **How To Transform Data to Story**

## **Transformation Process**

Step 1 : Brainstorming

Step 2 : Storyboarding

Step 3 : Narrative Framework





# Step 1 : Brainstorming

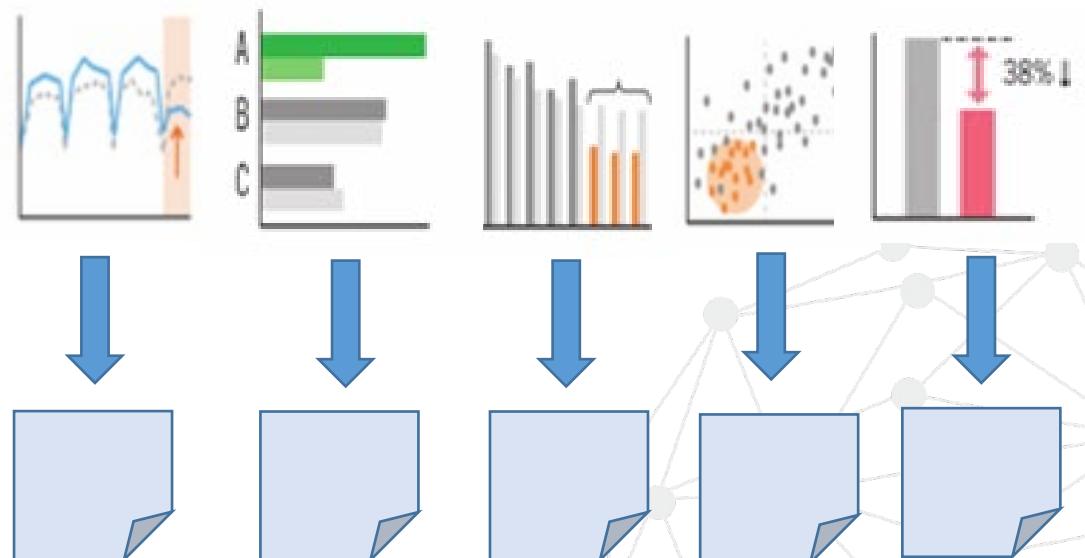


# How to do Brainstorming?

1. Start with all the charts you have created under data visualisation.



2. Ask : What pieces of content do you want to include?



3. Create short and concise content to fit into **sticky notes**.

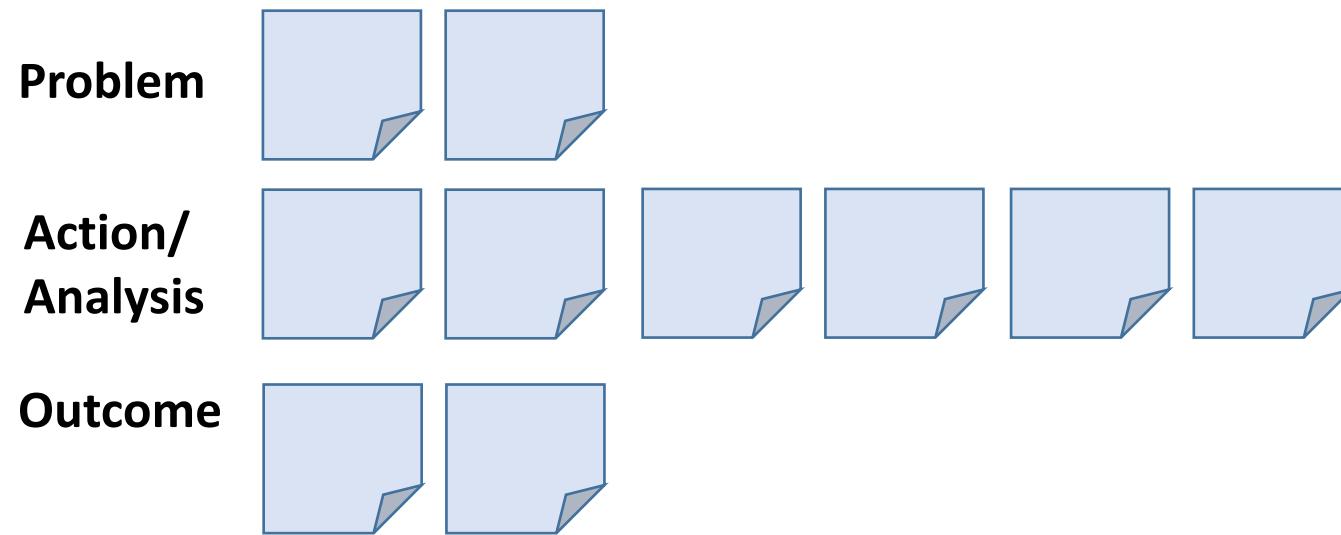


## Step 2 : Storyboarding



# How to do Storyboarding

1. Ask : How would you arrange the content to form a **visual outline**?
2. Park the sticky notes under “Problem”, “Action/Analysis”, “Outcome”



# Guide for Storyboard

Create a storyboard using the sticky notes.



<u>Context</u> Current Situation	<u>Driver</u> What's the problem? What's the tension?	<u>Goal</u> ??
-------------------------------------	---	-------------------



<u>Action Taken</u> Survey/past data What is it? Who we ask?	<u>Analysis</u> What we learnt? What caused it? Benefit/Risk	<u>Benchmark</u> What others did? Previous success?
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<u>Recommend</u> Introduce xxx Areas to improve How to measure success?	<u>Discuss</u> Resource needed Time required	<u>Action Needed</u> Approve xxx
--	--	-------------------------------------

# Storyboard : Fundraising for Pet Adoption

Create a storyboard using the sticky notes.

PROBLEM

ACTION / ANALYSIS

OUTCOME





## Step 3 : Narrative Framework

# Narrative Framework using Freytag's Pyramid

## Rising Action

Protagonist/Antagonist

Supporting details that reveal deeper insights into problem

Build up towards the climax

## Introduction

Setting, background to understand context + the hook

## Climax

Central insight - The most intense or **important** point



## Falling Action

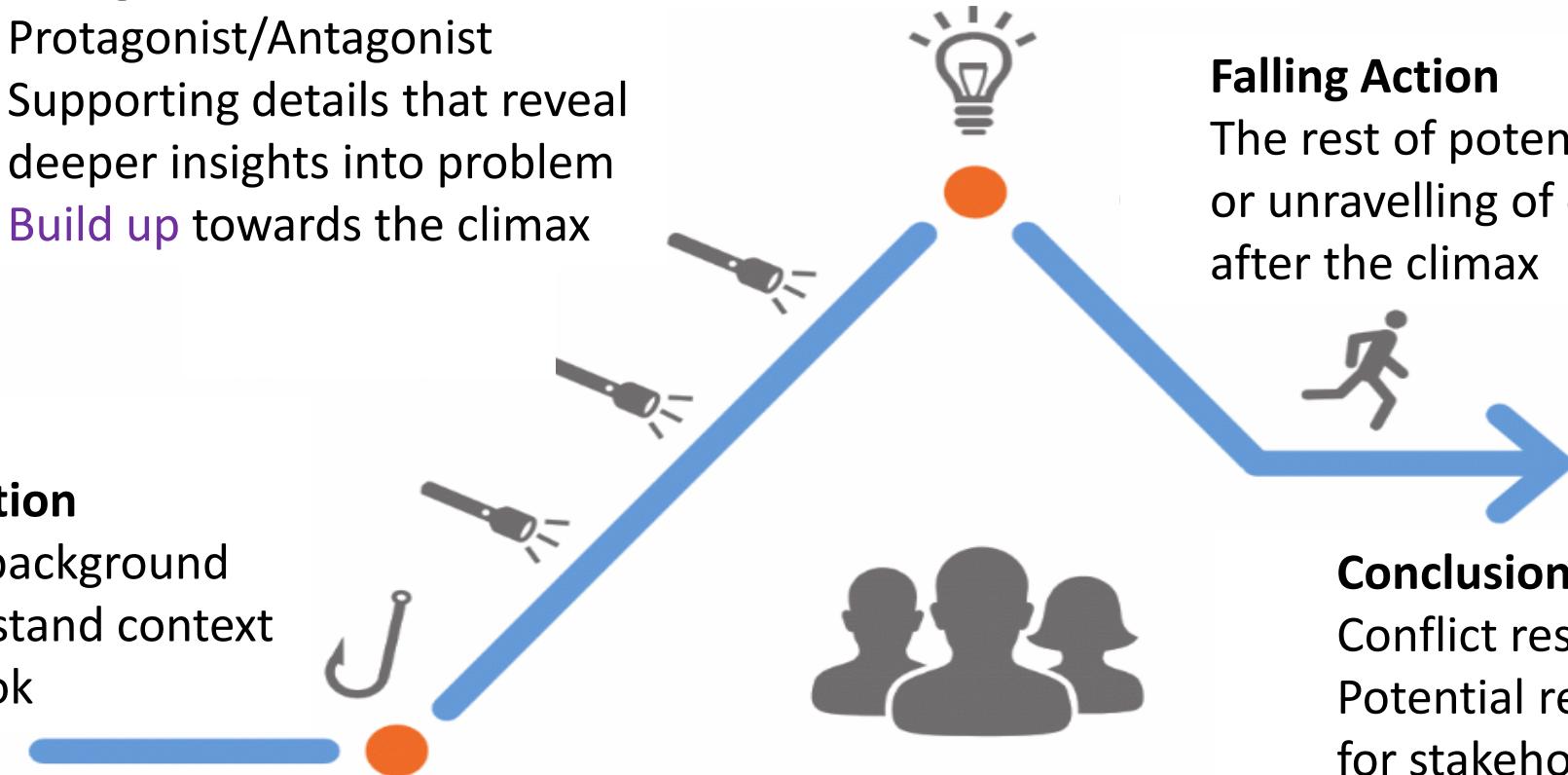
The rest of potential options or unravelling of events after the climax



## Conclusion

Conflict resolved

Potential recommendations for stakeholders to act on



Source: Dykes, Brent. *Effective Data Storytelling : How to Drive Change with Data, Narrative and Visuals,*

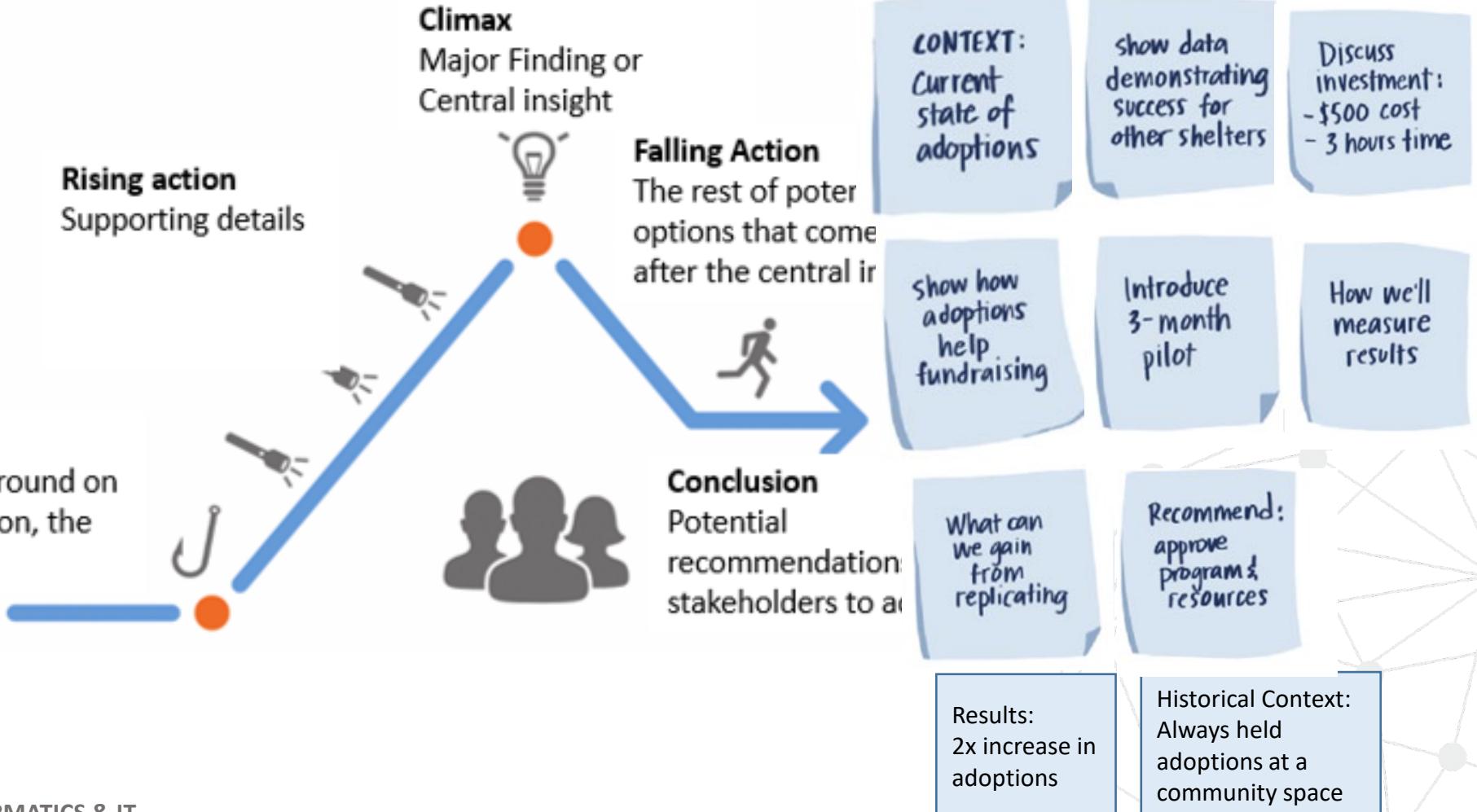
# Narrative Framework : Fundraising

Convert your storyboard into a narrative framework.

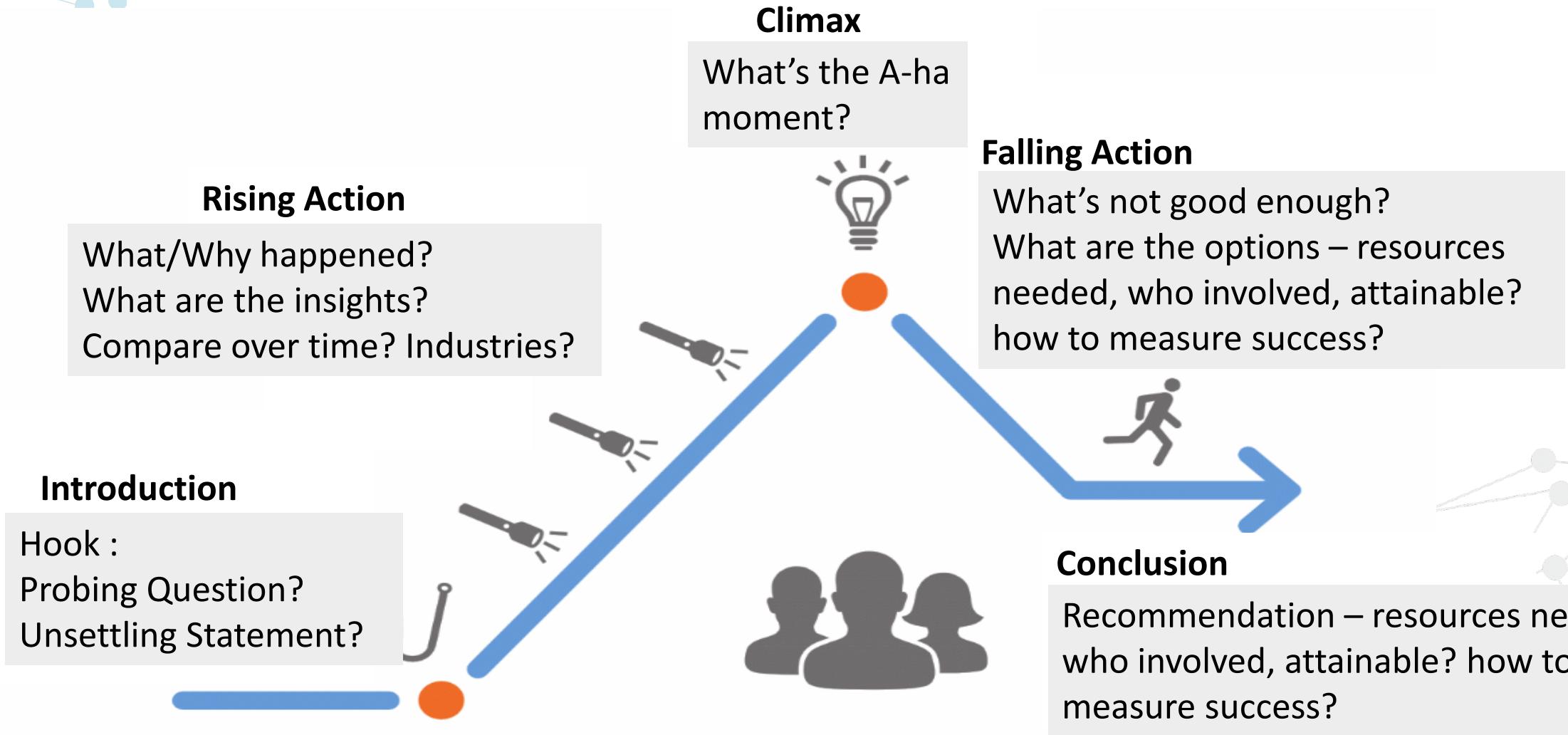


## Introduction

Setting, background on current situation, the hook



# Guide for Narrative Framework



Source: Dykes, Brent. *Effective Data Storytelling : How to Drive Change with Data, Narrative and Visuals*,



# Hands On

## Context and Narrative



## P04 - Context + Narrative: Elaborate

- Here, we will pick up from where we left off from the previous section on the Big Idea.
  - If you need, on LMS, head to “Activity 1: Context + Narrative” > “Practical Questions”. Download practical sheets and datasets.
  - You will get to practice doing storyboarding and creating a narrative framework for the Clothing Retailer example. Reflect on the good points and the challenges faced when attempting to use this approach for the first time all by yourself. Note that there is no one absolute, correct answer to this exercise.
  - Aim : To transform your data into a story using the approach mentioned above (storyboarding + narrative framework).
- 



## Let's Practice: Clothing Retailer

- a) Let us start with the big idea by considering the audience. Who are they? What might motivate them? What would keep them up at night? What action do you need them to take?
  
- b) With the audience in mind, create a storyboard. You can use the sticky notes in the power point slides provided to do this.
  
- c) Next, let's think about the narrative framework (Freytag's Pyramid). What tension exists for the audience? What does your analysis suggest that resolves this tension? What pieces of content will you need to provide your audience?

# Storyboard : Clothing Retailer

Create a storyboard using sticky notes.



What we learned from the data (analysis results)

OPPORTUNITY: inconsistencies in service levels

All the details  
- who we asked  
- who responded  
- competitors  
- etc.

Historically NOT data-driven

If nothing done, we will lose customers

Ways we considered becoming more data-driven

Survey!

RECOMMENDATION: invest in employee training (+ details)

Areas we did well  
Areas not-so-well

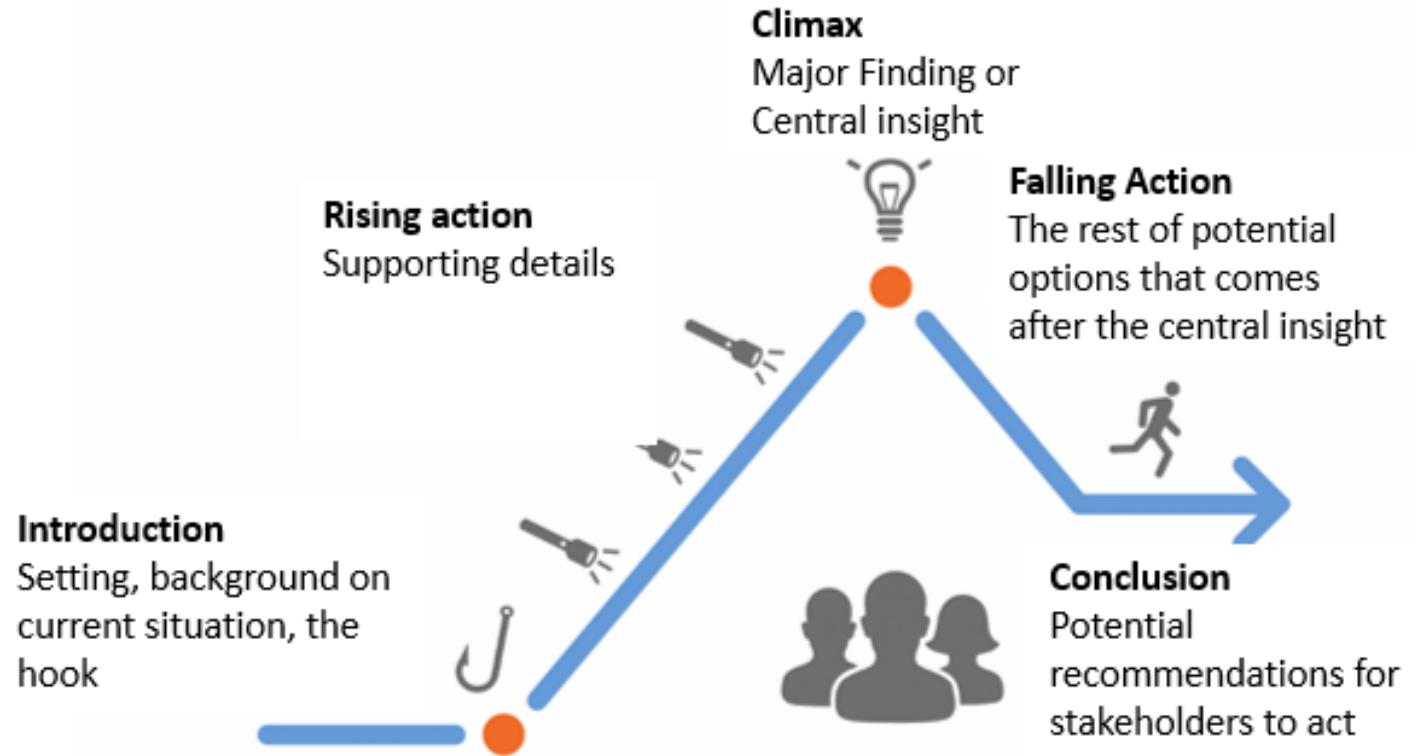
DISCUSSION / APPROVAL

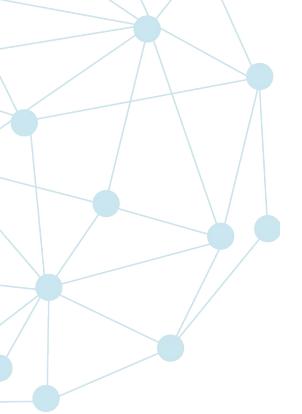
Back-to-school shopping is important (DEMONSTRATE)

# Narrative Framework : Clothing Retailer



Convert your storyboard into a narrative framework.

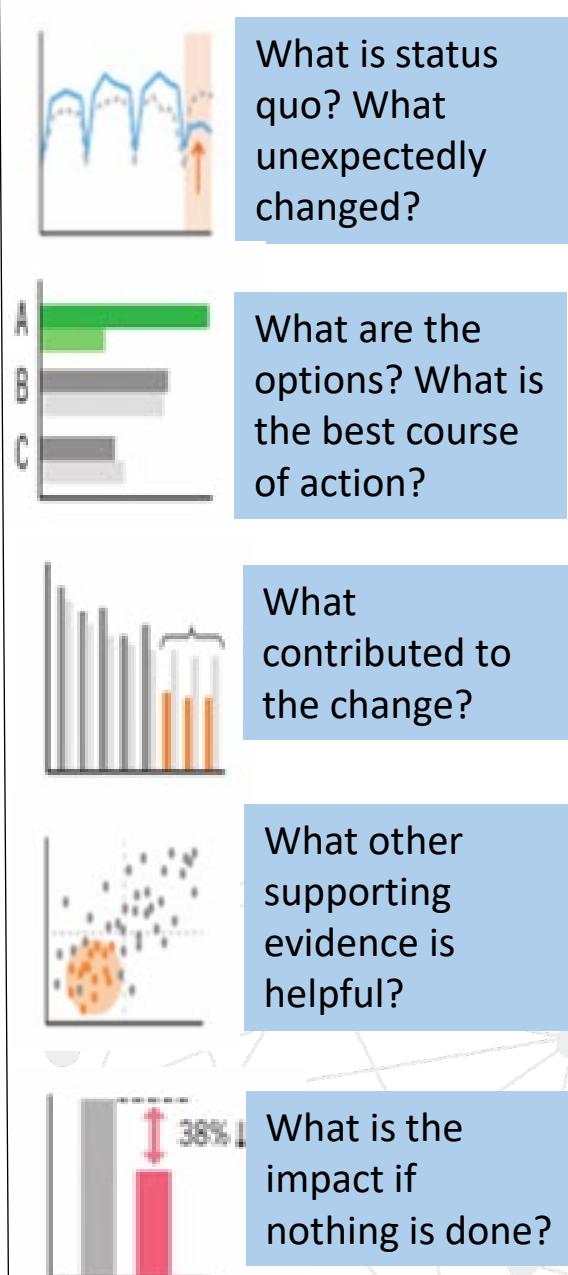
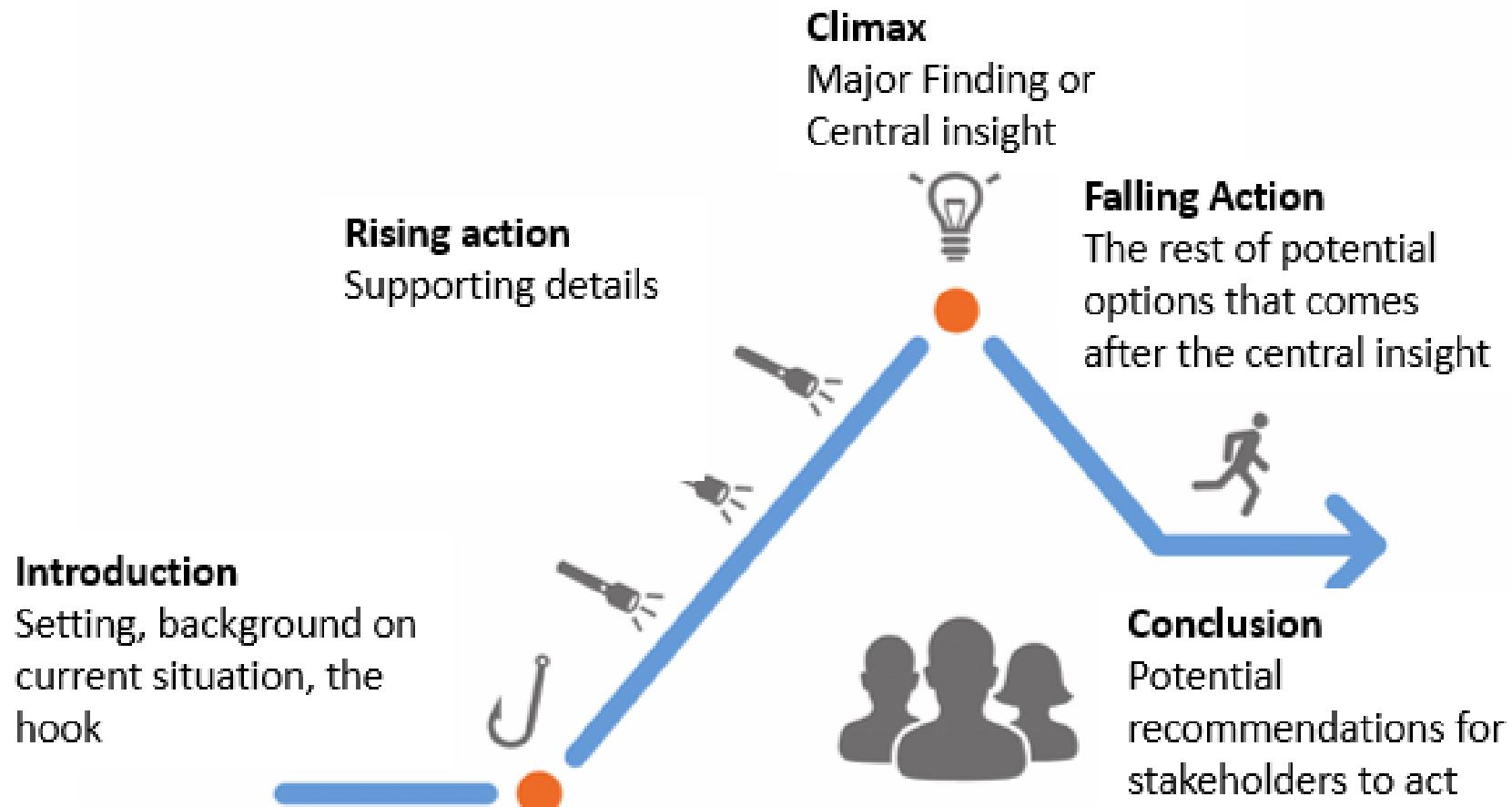


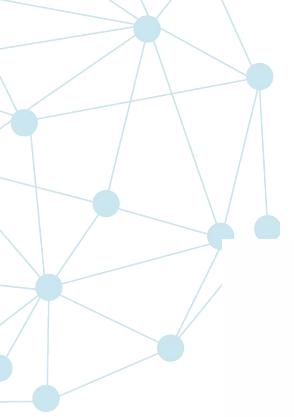


# Narrative Framework Activity : E-Commerce



# Narrative Framework Activity : E-Commerce





# A Sample Narrative Framework : E-Commerce

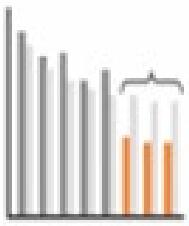
## Introduction

Last 3 years, sales > forecast.  
Hook : Sales is below forecast  
for year-to-date!!!



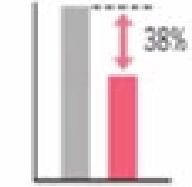
## Rising Action

Compared to previous years,  
Dark grey products – outperforming  
Orange products – underperforming



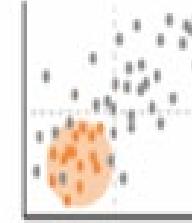
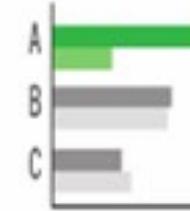
## Climax

Unless something is done,  
the company will miss the  
sales target by 38%!!!



## Falling Action

Product A still has high demand.  
Areas with opportunities :  
Products in lower bottom quadrant



## Conclusion

Recommend : Do something about ...  
Discuss : Resources, who involved etc.



# Data Storytelling – Narrative - Summary

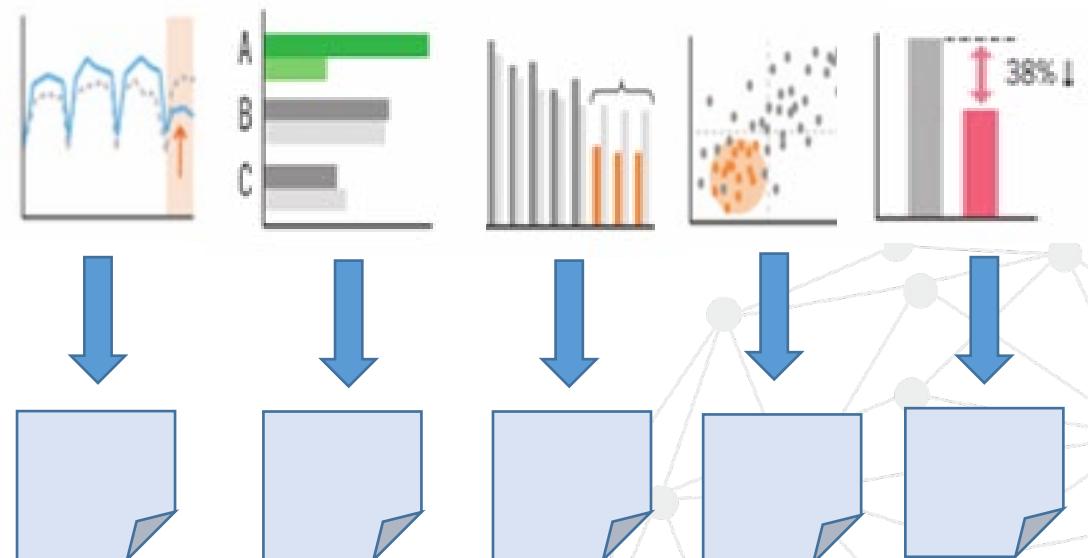


# Step 1 : Brainstorming?

1. Start with all the charts you have created under data visualisation.



2. Ask : What pieces of content do you want to include?



3. Create short and concise content to fit into **sticky notes**.



# Guide for Brainstorming

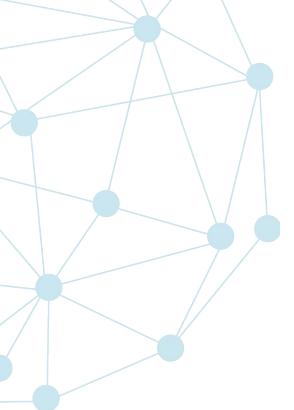
Make sure the notes are concise

Aim for about 10-20 points.

If using numbers, make sure they do not overwhelm

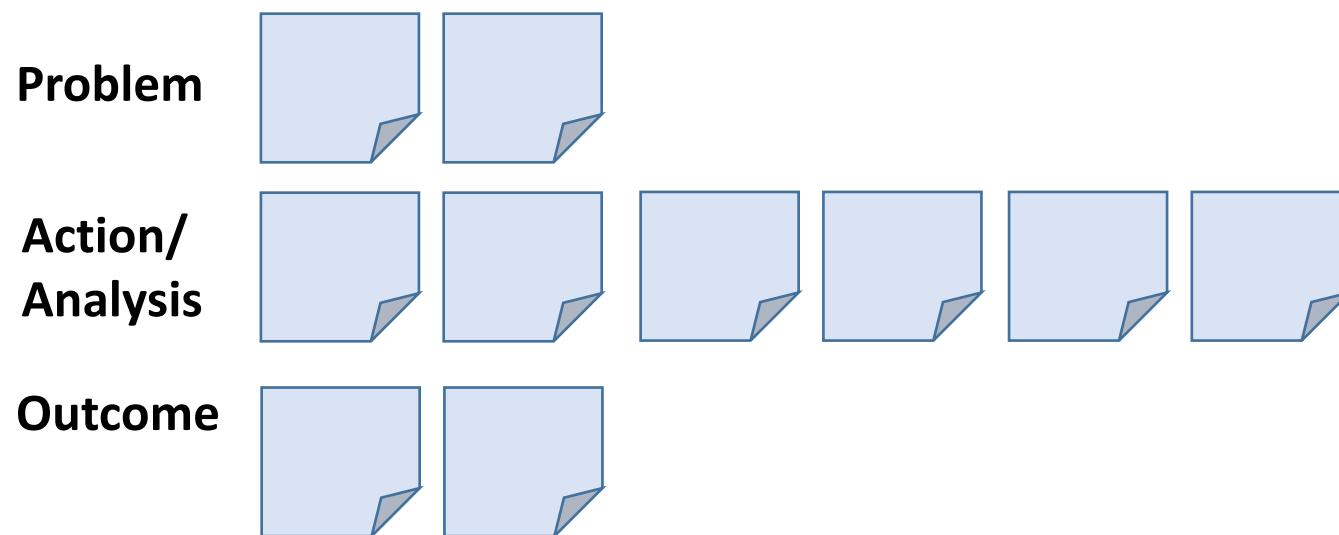
If using visuals to support the sticky notes, choose effectively





## Step 2 : Storyboarding

1. Ask : How would you arrange the content to form a **visual outline**?
2. Park the sticky notes under “Problem”, “Action/Analysis”, “Outcome”



# Guide for Storyboard



<u>Context</u> Current Situation	<u>Driver</u> What's the problem? What's the tension?	<u>Goal</u> ??
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<u>Action Taken</u> Survey/past data What is it? Who did we ask?	<u>Analysis</u> What we learnt? What caused it? Benefit/Risk	<u>Benchmark</u> What others did? Previous success?
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<u>Recommend</u> Introduce xxx Areas to improve How to measure success?	<u>Discuss</u> Resource needed Time required	<u>Action Needed</u> Approve xxx
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# Step 3 : Narrative Framework using Freytag's Pyramid

## Rising Action

Protagonist/Antagonist

Supporting details that reveal deeper insights into problem

Build up towards the climax

## Introduction

Setting, background to understand context + the hook

## Climax

Central insight - The most intense or **important** point



## Falling Action

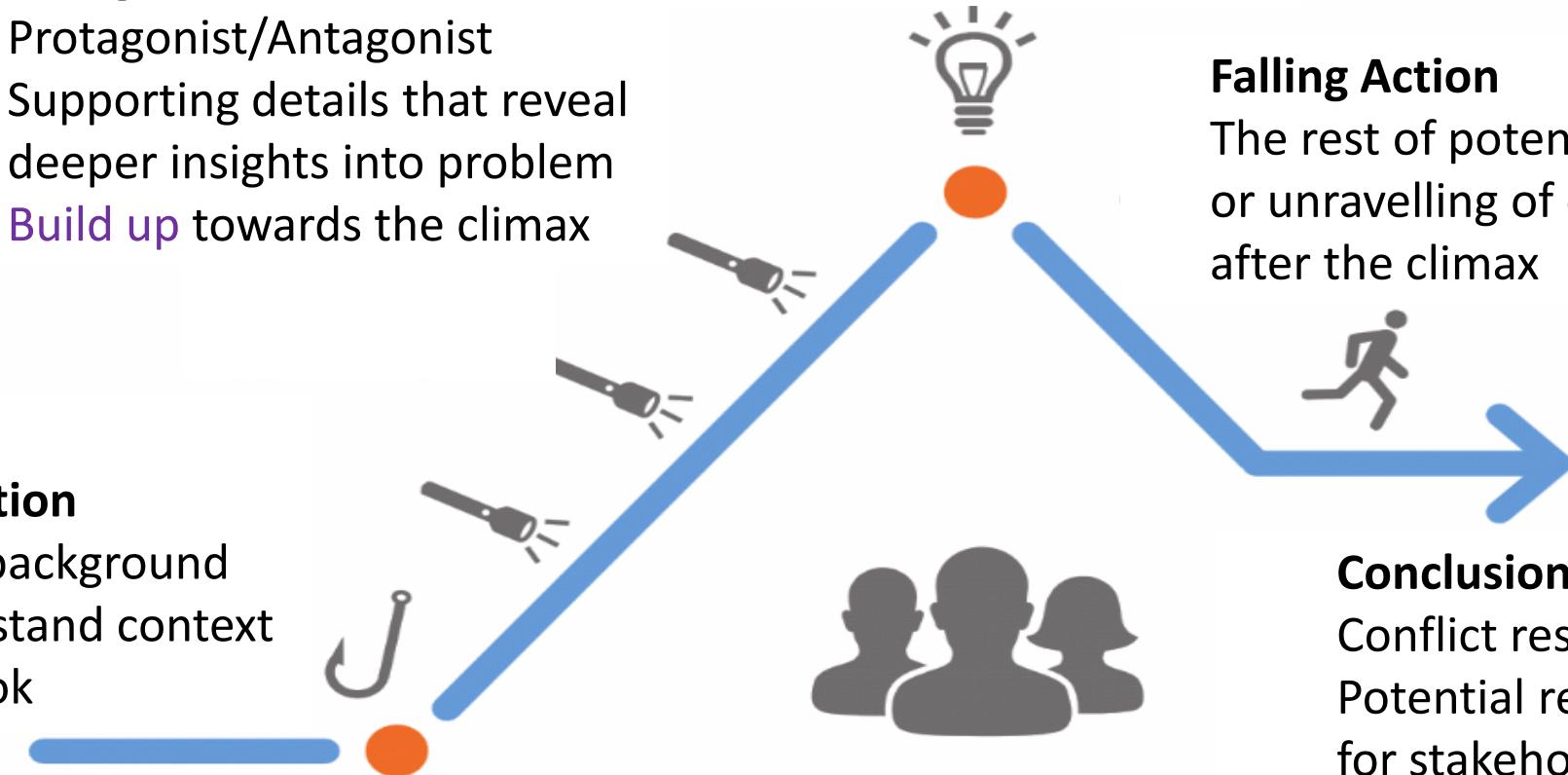
The rest of potential options or unravelling of events after the climax



## Conclusion

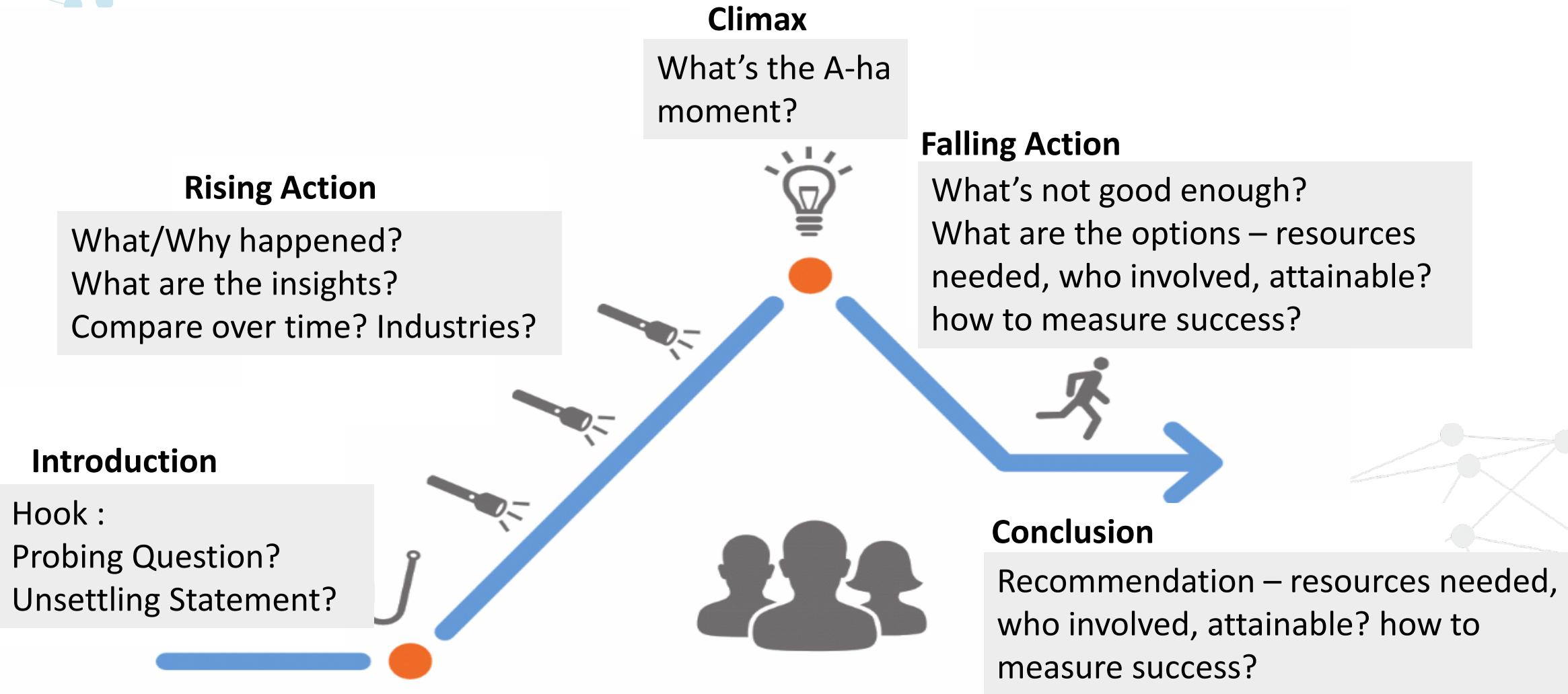
Conflict resolved

Potential recommendations for stakeholders to act on



Source: Dykes, Brent. *Effective Data Storytelling : How to Drive Change with Data, Narrative and Visuals,*

# Guide for Narrative Framework





# Tips for Narration Framework

Audience : What will interest them? What's their priority?

Does it build **empathy**?

Does it create a sense of **urgency** and motivate change?

Does it answer : “What is in it for me?”

Do they feel compelled to press the **action** button?

# Practical 4

<b><u>Before Class</u></b>	<b>Concepts</b>	Data Storytelling
<b><u>During Class</u></b>	<b>Hands-on</b>	Recap Intro to Data Storytelling Context Narrative
<b><u>After Class</u></b>	<b>Hands-on</b>	<p><i>Revise today's class with LMS: Apr/Oct – Week X (...)</i></p> <p><i>Go through Additional Resources slides</i></p> <ul style="list-style-type: none"><li>- <i>Read on the Science of Storytelling</i></li><li>- <i>Watch first 10 min of Brent Dykes 's video</i></li><li>- <i>Find the Hidden Message</i></li><li>- <i>Do more practice on Big Idea, Storyboarding and Narrative Framework (University Election)</i></li><li>- <i>Read on how to transform data from story</i></li></ul>