



# Data storytelling: its power and purpose

Do you want the insights you uncover in your data to be heard, remembered, and acted upon?

Then you need to make them memorable and impactful.

You need to tell them with stories.

We remember stories because they are emotive. You feel what the people in the story feel. In fact, your brain struggles to tell the difference between imagining the feeling and actually experiencing a story, so when someone has told you a story effectively, you remember it almost like you were there. And those emotions help anchor things in our brains because they had physical effects, like an increased heart rate or tears.

Despite what we like to believe, decisions are made based on emotion and backed up by logic - not the other way around. The power of data storytelling is that you can build a bridge from the logic to the influential, emotional area of the brain using both logical data and emotional stories - very handy for getting business people to make decisions.

In this guide, we will give you some top tips to maximize the power of your data storytelling and get people acting on your data insights.



# How to find your data story

Data storytelling starts with a data insight. The whole reason you want to share data is because you made a discovery and you need to persuade people to take action because of it.

Your insight should be a fact that changes your mind about a topic or adds depth of understanding and clarity to a particular topic. What does the data tell you? Is it an alarming or amazing change over time? Is it a lesson in what not to do? Is it a fact that is not widely understood or known but people should be aware of?

This data insight is the seed of your data story. It reveals a truth that you need to communicate in a memorable way.

The narrative you build around the insight could be your own story of discovery. Or, you could present multiple, shorter narratives, each one making a different fact memorable and personal. Combine the stories to inform people of the bigger picture.

The whole aim is to move people emotionally, then back up their understanding of the issue or insight with data.







# Map your data story to the dramatic arc

The foundation of every great and memorable story, like Spider-Man and other superhero movies, is the dramatic story arc. This structure helps to move a character or a situation from one state to another. The same arc applies when you are storytelling with data.

First, pinpoint the climax of your data story. It's probably the discovery of the data insight and how that conflicted with previous beliefs or behavior patterns.

Then work backwards. What was it that first put you on the path of uncovering the insight? Perhaps you had a problem that couldn't be solved and you set out to find a solution. Perhaps you wanted to see the effects of one variable on another, or how frequently a certain pattern occurred. Use this to set the scene and help your audience experience what you did.

Then build the action by sharing the struggles and trials faced in your search for the solution, or share the ever-growing nature of the problem, which initially led you to search for insights.

Finally, you reach the climax of your data storytelling – the do or die moment – which then led to everything finally resolving and falling into place.

Here are the steps of the dramatic arc you need to follow to tell a powerful data story:

#### **EXPOSITION**

To tell a compelling story, you first need to set the scene. Answer the who, what, where, and when. Help people understand the context of the problem you were experiencing.

Let's look at the story arc of Spider-Man as an example.

- Peter Parker the nerdy, high school senior, an outcast, enjoys science, and has a crush on Mary Jane.
- He lives with his uncle and aunt in New York City.
- Has one good friend, Harry, whose dad, Norman, really likes Peter.



## **RISING ACTION**

Next, sow seeds of conflict. Conflict is the heart of a story - it's the drama that creates tension and raises the 'what happens next?' question that compels people to pay attention. What hindered you?

- Peter is bitten by a genetically modified spider.
- · Norman is exposed to the super soldier formula.
- · Spider-Man and Goblin conflict.
- Peter's relationship with Mary Jane strengthens against Harry's liking.







## **CLIMAX**

The climax of the story is the part where everything turns – it's the peak of your data storytelling. The conflict comes to a head. Things could go either way and the audience is on the edge of their seats.

## Spider-Man:

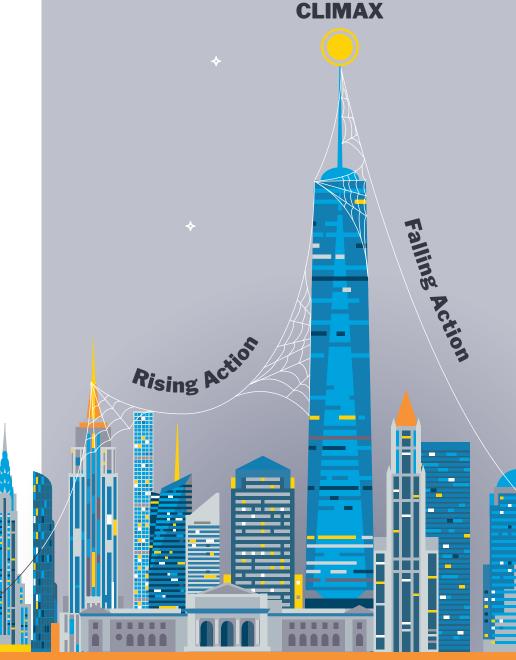
- Goblin forces Spider-Man to choose between saving Mary Jane and saving the people in the cable car
- · Spider-Man and Goblin proceed to fight to the death.

## **FALLING ACTION**

The falling action is where the outcome is known, tensions are eased, and all the pieces start to come together.

- · Goblin/Norman is killed
- Spider-Man then deals with the body and attends the funeral.

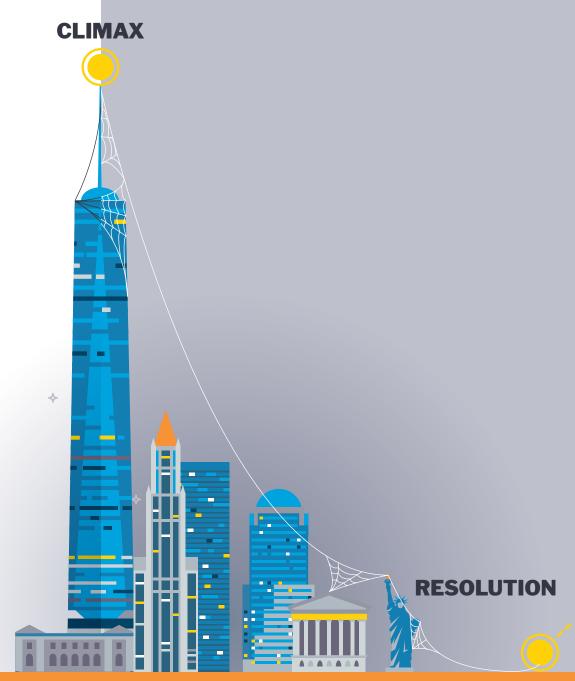




## **RESOLUTION**

The resolution ties together all the loose ends and resolves both the plot and subplots of the story. It's the part that leaves you feeling satisfied having seen everything work together. This is where you need to leave your audience with your core message and a call to action. The data story has a purpose – to make them act on the information and emotion they feel.

- · Harry restores his friendship with Peter
- · Mary Jane confesses that she loves Peter.



# Who is your data storytelling audience?

#### **Novice**

For a novice, this is their first exposure to the subject you are about to communicate. They need you to guide them through the data story, but they don't want oversimplification. Build their understanding as you unfold the story with data.

#### **Generalist**

A generalist is aware of the topic. They have a grasp of the basics and want an overview understanding of major themes. You can dip into some detail but don't deliver a technical run-down.

## **Managerial**

Managers have their hands in the details so have an in-depth, actionable understanding of intricacies and interrelationships. You can get right into the nittygritty with detailed data stories.

## **Expert**

Experts have a thorough understanding of the vast majority of the topic. You can get very technical. Experts may want to explore the topic themselves, so you could provide them with interactive data to check the validity of your story for themselves.

## **Executive**

Time-poor and making decisions at the highest levels, executives only have time to glean the significance and conclusions of weighted probabilities. They need short, punchy stories backed up with data that points to definitive conclusions.

## PITCH AT THE RIGHT LEVEL FOR YOUR AUDIENCE





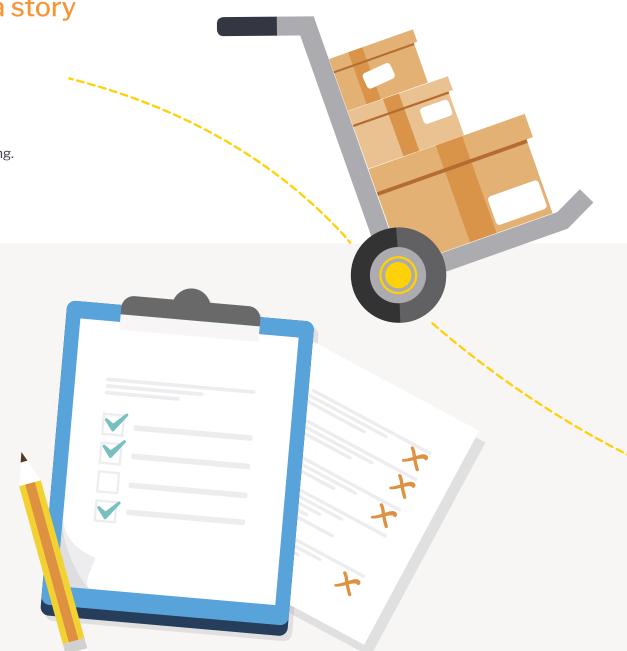
# Top tips for delivering your data story

## DON'T:

- Assume you can't do data storytelling. Everybody can; it just takes some practice to become proficient.
- · Overwhelm your listeners with details keep your story flowing.
- Give yourself the starring role as the unscathed victor truthfully expose your flaws and failures along the way.

## DO:

- Tell your story before the statistics we put up a guard of skepticism when hearing statistics but let it down to be entertained by stories.
- · Deliver the story and data insight from the heart.
- Speak from personal experience and true stories.
- Keep the central message central.
- Pitch at the right level for your audience.
- Use external data to support your insight.



# Including interactive reports in written data stories

The purpose of data storytelling is to convey a key message in an emotive story with data that supports so people are moved to act on that information. To keep the audience engaged and on-topic when reading your story, don't distract them with the chance to do a deep dive into the data using highly interactive, embedded data visualizations. You want them to have just enough information to satisfy their interest in the numbers being trustworthy, but not so much that they get lost in other ideas and tangents. Keeping interactivity to a minimum allows you to keep their attention and focus on the data you have highlighted.

Tool tips are almost always a great inclusion to help people quickly comprehend the data so you can keep your narrative flowing. You could also consider using filters if your insight is based on comparisons, or use time sliders if your insight is based on change over time. But you might be best to embed separate snapshots of these views so people don't get waylaid by data exploration.



## Now it's your turn

Stories have incredible power. They physically move us and biochemically change us – we release oxytocin when hearing stories, which increases our empathy. Stories drive real action if they stir emotion. That's why you feel pumped and ready to hit the gym after watching a film like Rocky, or you feel empathy and the desire to help after hearing a story of tragedy.

Now, it's your turn to tell stories, backed with data, that move people to action.

When you find your data insight and you determine what you want people to do as a result, pull out the story arc, map your narrative to it, back it up with data, and call people to action. Think like a TED talk presenter. Your data storytelling will sow an idea, a memory, a feeling. People can't forget that easily, so they have to do something about it.

Like all things, it will take some time to master the art of data storytelling. But with these tools, you will quickly be persuading people to act on the insights you and your analytics team have unearthed. This isn't about getting what you want, but it is about making people's decisions easier. If they can feel the pain, see the opportunity for change, and understand the action they need to take, the change will be much easier to begin implementing.



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Melbourne (HQ) Level 46, 360 Elizabeth St, Melbourne, VIC, 3000, Australia

Ph: +61385938938

EMEA Unit 10, Whittle Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8FT, United Kingdom

Ph: +44 (0) 1908 887 225

Sydney Suite 11.01, Level 11, 54 Miller St, North Sydney, NSW, 2060, Australia

**Ph:** +611300651217

Tokyo The Park Rex Koamicho Bldg 5F, 11-8 Nihonbashikoamicho, Chuo-ku, 103-0016, Japan

Ph: +81 3 6667 0282

North America 110 Lindsay Circle, Suite A, Ketchum, ID 83340, United States of America

**Ph:** +1 (844) 424-5678

Osaka EDGE Honmachi 3F 2-3-12 Minamihonmachi, Chuo-ku, Osaka-shi, Osaka 541-0054, Japan

Ph: +81 6 6123 7293

## yellowfinbi.com