



Gabrielle Dolan
The Science of
Storytelling



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The Science of Storytelling

Storytelling has been around since the dawn of time and humans have always communicated using stories. Evidence of this is seen from paintings left behind by our cave-dwelling ancestors to the Aboriginal culture and Dreamtime storytelling, which continues to be passed down generation to generation.

It's only recently, however, that modern business has started to realise the power and potential of this ancient art.

In a world of information overload and short attention spans business people are looking for a more effective way to get their messages across and to help them stand out from all the 'noise'. Combine this with an appreciation of being more authentic in the way we lead, it is no surprise that storytelling has emerged as a powerful tool.

You might already be aware that telling a story makes good sense, but it is more than that. It is actually based on good science.





Stories tap into emotion

Our brain has different parts, and each part has a different job. The left side of our brain, for example, helps us think logically and organise our thoughts, while the right side helps us experience emotions and recall personal memories. We also have a ‘reptile brain’ that makes us act instinctively and a ‘mammal brain’ that helps us connect in relationships. And our brains have a ‘neocortex’, which is connected to a complex series of nerves and networks called the ‘limbic system’. This is responsible for the development of the bond we feel between us and another (like the mother–child bond).

In his international bestselling book *Emotional Intelligence*, Daniel Goleman explains that our evolved neocortex is the reason our emotions are so powerful. ‘As the root from which the newer brain grew, the emotional areas are intertwined via myriad connecting circuits to all parts of the neocortex. This gives the emotional centres immense power to influence the functioning of the rest of the brain,’ he says.

When we tell stories all the different parts and areas of our brain are stimulated and start to work together, combining words and logic and emotions and sensory images, so we see the whole picture and communicate our experience. Essentially, with all this activity going on, our emotions go into overdrive.

This means that stories provoke our emotions. Good stories make us feel something as we listen to them - excitement, anger, sadness, empathy or enthusiasm. Consequently, feeling these emotions means we feel something towards the person telling the story, which helps create connection – the bond like the ones our neocortex helps develop.



Stories build trust and credibility

In the 2014 Harvard Business Review article ‘Why your brain loves good storytelling’, neuroeconomist Paul Zak revealed the powerful impact the love hormone oxytocin has on the brain when we tell stories.

Oxytocin is also often referred to as the ‘trust hormone’. Our bodies release it when we are with people we love and trust, when we hug, or even when we shake hands in a business meeting. And it’s released when we listen to stories. Oxytocin being released signals to the brain that everything is okay and it is safe to approach others – essentially, that we won’t be attacked or eaten, as would have been the risk back in the day.

So not only does a good story make us feel different emotions and a connection to the storyteller but, at the same time, the love hormone oxytocin is also signalling that we can be trusted, which in turn helps build our credibility.



“Imagine if we invented a device that could record my memories, my dreams, my ideas and transmit them to your brain. That would be a game-changing technology, right? But, in fact, we already possess this device and it’s called the human communication system and effective storytelling.”

Uri Hasson

Neuroscientist Uri Hasson opened his 2016 TED talk with this quote.

Hasson’s research shows that even across different languages, our brains show similar activity when we hear a story, becoming what he calls ‘aligned’ or ‘synchronised’.

In one study, listeners lay in the dark waiting to hear a story spoken out loud. The moment the story started, the auditory cortex of the listeners’ brains, the area that processes sound, became active and aligned. Hassan calls this ‘neural entrainment’.

The participants were also shown a clip from the BBC TV series Sherlock. Months later, one participant was asked to tell another about the scene they watched. The results showed that the brain of the person telling the story aligned with the same activity their brain showed when they watched the show some months earlier. Furthermore, the brain of the participant who was listening to the story also aligned in a similar way.

So what does all this prove? Listening to a story being told is effectively like reliving that story as if it were yours. What better way to create common ground and a shared understanding with someone you don’t know? And this is especially the case if you’re making a presentation to an audience of 1000 strangers or even facilitating a one-on-one coaching session.



Stories Drive Decisions

Just some of the questions running through the minds of your audience when we are talking to them include the following:

- **Do I buy from you?**
- **Do I respect or follow you?**
- **Do I get behind this change?**
- **Do I accept the role with you?**
- **Do I take your advice?**
- **Do I believe you?**

Your audience will be forming these types of questions whether we're trying to get them to buy-in to an organisational change or motivating them towards next year's goals.

Usually, we try to influence them with a PowerPoint presentation of facts and figures or an outline of the pros and cons of whatever it is we want them to feel excited about. These strategies are all based on logic. Yet, science says that we make up our minds to the types of questions I listed based on our emotions and how we feel about something.

Research by neuroscientist Antonio Damasio shows emotion plays a significant role in our ability to make decisions. While many of us believe logic drives our choices, the reality is that we have already made an emotional decision and we then use logic to justify the choice – to ourselves and to others.



Damasio's research involved examining people with damage to their frontal lobe, which is the area of the brain where emotions are generated and that helps to regulate personality. Except for their inability to feel or express emotions, the participants had normal intellect in terms of working memory, attention, language comprehension and expression. However, they were unable to make decisions.

The vast majority of participants could describe in logical terms what they thought they should be doing, but they found it difficult to actually make a decision, including making a simple choice like what to eat. This indecision came from them going over the pros and cons for each option again and again. Presented with a choice to make, we struggle to make a decision without some form of emotion influencing it.

Damasio's research does not stand alone. According to Christine Comaford, neuroscience expert and author of the New York Times bestseller *Smart Tribes: How Teams Become Brilliant Together*, 90 per cent of human behaviour and decision-making is driven by our emotions.



Stories Influence

Not fully understanding this is often why we get incredibly frustrated when our team members do not do what we want them to do. In our mind, our request makes logical sense! But as bestselling author Dale Carnegie put it, ‘When dealing with people, let us remember we are not dealing with creatures of logic. We are dealing with creatures of emotion.’

That’s why it’s important to note the difference between a case study and a story. Case studies are based on logic, facts and figures. They still play an important role in business, but not from the standpoint of connecting with someone on an emotional level.

Marketing executives and advertisers are acutely aware of the power of using storytelling and emotion in business to drive purchasing decisions. You only have to look at the latest car advert for proof!

A study of over 1400 marketing campaigns submitted to the UK-based Institute of Practitioners in Advertising (IPA) rated how effective marketing campaigns were, based on profit gains. The results showed:

- **campaigns based purely on emotion rated as 31% effective**
- **campaigns based purely on logic rated as only 16% effective**
- **campaigns that combined emotion and logic rated as 26% effective.**

This research indicates that using logic alone has the least impact and using emotion has almost double the impact. (For more on this research, go to www.neurosciencemarketing.com/blog and search ‘emotional ads’)

Storytelling is deeply rooted in making an emotional connection with another person. That’s why if you’re looking to make an impact or influence someone at work, it makes scientific sense to use a story.



Stories grab and hold attention

Anyone who works in business must sit up and take note of these findings, especially that it is emotion, not logical information, which helps others to remember messages. Too many leaders in business believe that their having an important message to share, such as the new strategy or technical change, is reason enough for their audience to listen. (For more on the preceding findings, go to www.memory-key.com/memory/emotion.)

Unfortunately, focusing on logical information usually produces the opposite effect. Without a story or a connection to how this new strategy is going to make listeners feel, the message is usually lost or slept through and forgotten. This is why you should use a story.

The safety industry has been decades ahead of the rest of business when it comes to memorable campaigns and messages — and, in particular, Air New Zealand. The airline is renowned for using humour and storytelling in their inflight videos to deliver crucial information when it comes to safety in the air.





In 2011, the first of these videos was launched starring American fitness guru Richard Simmons. ‘Fit to Fly’ shows a bunch of lycra-clad passengers working out as they buckle up and demonstrate putting on their oxygen masks. The video has had over three million views on YouTube — pretty amazing for a boring old safety video! Other Air New Zealand campaigns featured Bear Grylls (from *Man vs. Wild*) and Golden Girls actress Betty White. If you haven’t seen them, you can find them easily via a quick search on YouTube.

Australian airline Qantas is also starting to follow this lead. While they do not use humour like Air New Zealand, they do use stereotypical Australian characters and scenes outside of a plane to deliver the safety messages. (You can also find Qantas examples on YouTube.)

So if you lead a safety meeting as part of your role — or, indeed, need to impart other kinds of critical information — this is an opportunity for you to start sharing a story instead of reading out a list of bullet points about compliance with your team.

The research in this white paper proves that tapping into emotion not only aids our understanding of a logical message, but also helps us retain that information. We are more likely to remember a good story as opposed to a bunch of facts.

As American poet Maya Angelou famously said, ‘People will forget what you said. People will forget what you did. But people will never forget how you made them feel.’



Next Steps

If this sounds like something you want to explore, contact us to discuss tailored in-house workshops and how we can work with you to implement storytelling strategically across your organisation.

Contact us by calling +61 3 8383 2128 or send an email to enquiry@gabrielledolan.com.

To download a checklist on how to introduce storytelling into your organisation and access other free resources go to www.gabrielledolan.com



G a b r i e l l e D o l a n

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About the Author

Gabrielle Dolan can tell you a story or two.

In fact, it was while working in a senior leadership role at National Australia Bank that she realised the power of storytelling in effective business communication. Since that epiphany, Gabrielle has found her calling as a global expert on strategic storytelling and real communication.

A highly sought-after keynote speaker, educator and author, Gabrielle's extensive client list includes Telstra, EY, Accenture, VISA, Australia Post, National Australia Bank, Amazon, Vodafone and the Obama Foundation.

Gabrielle holds a master's degree in management and leadership, an associate diploma in education and training and is a graduate of the Harvard Kennedy School of Executive Education.

In 2024 she launched the successful podcast *Keeping it Real with Jac and Ral* that

consistently ranks well in the best business podcast charts. Episodes explore different topics such as personal brand, public speaking, energy management, negotiation and other great ways to keep you real.

Gabrielle is also the bestselling author of seven books. Her latest title, *Magnetic Stories: Connect with customers and engage employees with brand storytelling* was published by Wiley in March 2021 and debuted at number two on Australia's best-selling business books.

Bringing humanity to the way business people communicate isn't just a career, it's a calling. Her dedication to the industry was recognised when Gabrielle was awarded the 2020 Communicator of the Year by the International Association of Business Communicators Asia Pacific region. The ultimate expression of her passion for the cause is her Jargon Free Fridays global movement (jargonfreefridays.com).



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This is an edited extract from, *Stories for Work: The essential guide to storytelling*, by Gabrielle Dolan. Published by Wiley in February 2017.

Books by Gabrielle

