

Science Doesn't Sell Itself; It Needs a Story

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Why Storytelling is Important for Technical Information

Despite how clear you believe your expert's opinions are, how irrefutable the numbers are, technical evidence does not sell itself. Many people do not understand how to interpret scientific or technical information and some people, today more than ever, are even suspicious of science.

Most people do not process abstract concepts very well, but they do tend to empathize with others who share similar interests and experiences. It is critical to know your audience, whether it is a jury, judge, or a witness, to really know them as humans and speak to them with human stories and incorporate the science or technical information to support parts of the story.

Decisions are often based on emotion rather than logic. Emotion is important in helping us make timely decisions. Neuroscience research has shown that people who have brain damage in the area that helps process emotions have difficulty making decisions such as choosing a restaurant. Their decision-making skills are impaired due to lack of emotional judgment. Telling a story with technical information involves a combination of data, visuals, and narrative. When you combine these elements correctly, you have a story that can influence the emotion of your audience.

Use technical information to support your narrative that reinforces shared values among your audience members. Do not assume that because data supports a particular conclusion that your audience will reach the conclusion without a familiar narrative that resonates with their personal experience. It is not enough that scientific data support a particular element of your story, the story should explain why the concept is believable on a human level. What conclusion does the data support and how does it fit into the context of the position you advocate?

Creating Compelling Stories

Storytelling means structuring your ideas properly to convey your intended message. Using technical information requires balancing several components, including telling a story with a clear message and logical sequence that is adapted to the audience, and incorporating statistics or science that give in-depth analysis or scientific support.

1. What is your goal

Begin constructing your story by determining what specific question you are trying to answer (a particular question in a jury charge), the goal you want to reach (a negative finding on a liability question), and how your expert information or scientific data is relevant to answering the question or reaching your goal.

2. Simplify

Break down technical concepts into pieces that can be explained to a young child. Use simple language and avoid technical terminology as much as possible. The more technical terms you have to define and that your audience must remember, the more difficult it is to follow your story. Using clear, simple language does not mean you cannot communicate difficult ideas. You can build a technical story by creating a narrative one simple idea at a time. Remember that our ability to comprehend technical information has not progressed as quickly as innovation itself.

If statistics are helpful to your story, create a visual exhibit or a colorful graph or chart, rather than just a list of numbers. Explain what the parts of the graph mean in simple terms so that your jurors or other audience will be able to refer to the infographic and advocate your position to each other during deliberations. Explain why the technical information is important and how it impacts the people and events in your story.

You can get ideas about how to create simpler stories from technical information by searching for “your key word” plus “explain to a 5-year-old.”¹ You will find examples of how to simplify most anything.

3. Techniques

Developing a compelling story using technical information helps make the information more memorable, more persuasive, and more engaging for the audience.

A deliberate way to start building a compelling story is to use a formal storytelling structure such as Freytag's Pyramid which can help ensure that you include the necessary elements for a complete narrative. Freytag's Pyramid is a structure for dramatic storytelling that includes the following five elements:

- a. Exposition
- b. Rising action
- c. Climax
- d. Falling action
- e. Catastrophe or resolution

¹ 5 Storytelling Ideas for your Next Technical Presentation, Valdas Maksinavicius, November 13, 2016.

Once you have created a compelling narrative, you can reference technical information at critical points along the story line.

Consider the age, demographics, and background of the audience. For example, a jury with multiple engineers may appreciate lists of numbers or graphs more than a jury with people from less technical backgrounds. It is not enough to simply explain the data shown by graphs or technical diagrams. It is critical to connect the data to the story you are telling and discuss how the data supports the storyline and resolution to the problem. Doing so creates buy-in from your audience and encourages them to reach your conclusion.

Reuse Familiar Stories

Use familiar examples to help make concepts more understandable and relatable. While outside counsel and the client may spend two or more years working on a case and develop intimate knowledge about the subject (the product, process, market, accident, transaction, etc.), jurors and the judge only have a short time to learn about your case and why your position is correct.

Using familiar story lines like those found in fairy tales, movies, or popular books or games, helps create immediate connection with your audience. Building your narrative around a story your audience already knows accelerates and enhances their understanding of your position. Use technical evidence (expert testimony, literature, testing, etc.) to buttress points in your narrative that supports elements of your claim or defense.

Your audience will not be familiar with materials science, but they know The Three Little Pigs, a fable about three pigs who build three houses of different materials. Think of your narrative as building a house. Each part of your story is a brick, but the science and technical information is the mortar that you put around the bricks to build a solid structured narrative. Make sure to explain the context of the scientific information and why it is important to helping your audience reach your intended conclusion.

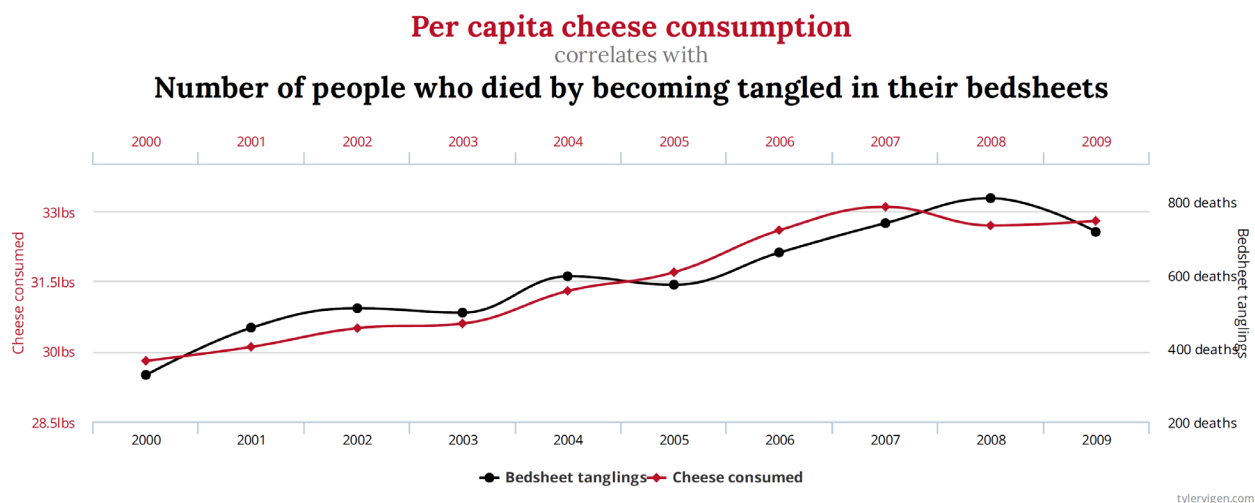
Maximize Credibility

Walter Fisher, an American academic who developed narrative theory, suggested that all communication happens through narratives, symbolic interpretations of the world that connect with particular times and places. Consider that it is more important how stories are interpreted and believed than whether they include scientific truth. It is easy for an audience to believe a story that is coherent and consistent even if it is not true. Rumors spread easily when the story follows a familiar narrative and includes simple arguments that resonate with the audience even though such a rumor can include lies and stereotypes that are harmful.

Your narrative is stronger when your technical information is more credible. Strategies to maximize the credibility of your technical data or scientific information include:

- Disclose potential biases in the data that you use in your story because you can be certain the opposing party will do so. Being the first to share bias or potential flaws in data analysis helps humanize the data and connect with your audience. Showing vulnerability in your narrative is important to connect the speaker to the audience.
- Do not manipulate the scale of data when selecting the units of measurement. Doing so can make statistics or other data compelling, but it may create a false representation that will be easily attacked.
- Do not cherry pick only specific data points that support your ideas if there is as much or more data that contradicts your idea.
- Be consistent with visual representations of data, such as consistent colors, labels, and naming conventions, which creates cohesiveness in your storytelling.
- Statistics and other data can be manipulated to support alternative positions, which is why it is all the more important to break it down as simply as possible, to help avoid confirmation bias.

When your opponent fails to do any of these things, highlight such inconsistencies or inaccuracies for the jury during cross-examination or elsewhere. For example, a concept that often comes up with experts is the difference between correlation and causation. Correlation refers to the degree of association between two variables, how closely they resemble one another. Positive correlation is when A increases B also increases, or if A decreases then B decreases. Negative correlation is when A increases then B decreases and vice versa. However, correlation does not suggest A caused B or B caused A. Sometimes it is just a coincidence. For example:



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Of course, eating more cheese does not cause you to be more likely to die from bedsheet entanglement. Be on the lookout for such spurious arguments from experts or misrepresentations in material presented as technical “evidence.”

² Spurious Correlations, www.tylervigen.com.

Your audience may prefer that you simply told a story with technical or scientific information, but sometimes it is necessary in order to meet a legal standard of proof or because your audience requires it. Use the necessary technical information to support points of your narrative to help connect the hearts and minds of your audience. Data usually explain the “what,” which jurors may understand in their minds, but you must develop a compelling narrative to connect the data to the “why” if you want to also reach their hearts. Using a compelling human story to communicate your technical information makes your position more relatable, more memorable, and more likely that the listener can communicate your position to others.