Tell a Meaningful Story With Data

Most organizations recognize that being a successful, data-driven company requires skilled developers and analysts. Fewer grasp how to use data to tell a meaningful story that resonates both intellectually and emotionally with an audience. Marketers are responsible for this story; as such, they’re often the bridge between the data and those who need to learn something from it, or make decisions based on its analysis. As marketers, we can tailor the story to the audience and effectively use data visualization to complement our narrative. We know that data is powerful. But with a good story, it’s unforgettable.
Rudyard Kipling once wrote, “If history were taught in the form of stories, it would never be forgotten.” The same applies to data. Companies must understand that data will be remembered only if presented in the right way. And often a slide, spreadsheet or graph is not the right way; a story is.

Executives and managers are being bombarded with dashboards brimming with analytics. They struggle with data-driven decision making because they don’t know the story behind the data. In this article, I explain how marketers can make that data more meaningful through the use of storytelling.

The power of a meaningful story

In her “Persuasion and the Power of Story” video, Stanford University Professor of Marketing Jennifer L. Aaker explains that stories are meaningful when they are memorable, impactful and personal. Through the use of interesting visuals and examples, she details the way people respond to messaging when it’s delivered either with statistics or through story. Although she says engagement is quite different from messaging, she does not suggest one over the other. Instead, Aaker surmises that the future of storytelling incorporates both, stating, “When data and stories are used together, they resonate with audiences on both an intellectual and emotional level.”
In his book Facts Are Sacred, Simon Rogers discusses the foundations of data journalism and how The Guardian is using data to tell stories. He identifies ten lessons he's learned from building and managing The Guardian's Datablog, a pioneering website in the field. I found three of the lessons particularly insightful:

**Data journalism (and analytics in a broader sense) is a form of curation.** There is so much data and so many data types that only experienced analysts can separate the wheat from the chaff. Finding the right information and the right way to display it is like curating an art collection.

**Analysis doesn't have to be long and complex.** The data collection and analysis process can often be rigorous and time consuming. That said, there are instances when it should be quick, such as when it's in response to a timely event that requires clarification.

**Data analysis isn't about graphics and visualizations; it's about telling a story.** Look at data the way a detective examines a crime scene. Try to understand what happened and what evidence needs to be collected. The visualization—it can be a chart, map or single number—will come naturally once the mystery is solved. The focus is the story.

Stories, particularly those that are meaningful, are an effective way to convey data. Now let's look at how we can customize them for our audiences.

**Identify the audience**

Most captivating storytellers grasp the importance of understanding the audience. They might tell the same story to a child and adult, but the intonation and delivery will be different. In the same way, a data-based story should be adjusted based on the listener. For example, when speaking to an executive, statistics are likely key to the conversation, but a business intelligence manager would likely find methods and techniques just as important to the story.

In a Harvard Business Review article titled “How to Tell a Story with Data,” Dell Executive Strategist Jim Stikeleather segments listeners into five main audiences: novice, generalist, management, expert and executive. The novice is new to a subject but doesn't want oversimplification. The generalist is aware of a topic but looks for an overview and the story's major themes. The management seeks in-depth, actionable understanding of a story's intricacies and interrelationships with access to detail. The expert wants more exploration and discovery and less storytelling. And the executive needs to know the significance and conclusions of weighted probabilities.
Discerning an audience's level of understanding and objectives will help the storyteller to create a narrative. But how should we tell the story? The answer to this question is crucial because it will define whether the story will be heard or not.

**Using data visualization to complement the narrative**

Analytics tools are now ubiquitous, and with them come a laundry list of visualizations—bar and pie charts, tables and line graphs, for example—that can be incorporated into reports and articles. With these tools, however, the focus is on data exploration, not on aiding a narrative. While there are examples of visualizations that do help tell stories, they’re rare and not often used in meetings and conferences. Why? Because finding the story is significantly harder than crunching numbers.

In their “Narrative Visualization: Telling Stories with Data” paper, Stanford researchers discuss author versus reader-driven storytelling. An author-driven narrative doesn’t allow the reader to interact with the charts. The data and visualizations are chosen by the author and presented to the reader as a finished product, similar to a printed magazine article. Conversely, the reader-driven narrative provides ways for the reader to play with data.

With the advent of data journalism, we’re now seeing these two approaches used together. According to the Stanford researchers, “These two visual narrative genres, together with interaction and messaging, must balance a narrative intended by the author with story discovery on the part of the reader.”

A good example of a hybrid author-reader approach is the presentation of The Customer Journey to Online Purchase tool. A few short paragraphs explain why the tool was created and how it works, and an interactive chart allows marketers to break down the information by industry and country. Additional interactive data visualizations provide even more context.

Another extremely efficient and visual way to tell a story is by using maps. In a tutorial on visualization, I show how a large data set can be transformed and incorporated into a story. It’s an example of how to take charts and graphs to the next level in order to add value to the story. In this case, I use Google Fusion Tables and some publicly available data to illustrate analytics data with colorful, interactive maps. The visualization provides more content for those interested in diving deeper into the data.
A good data visualization does a few things. It stands on its own; if taken out of context, the reader should still be able to understand what a chart is saying because the visualization tells the story. It should also be easy to understand. And while too much interaction can distract, the visualization should incorporate some layered data so the curious can explore.

Marketers are responsible for messaging; as such, they’re often the bridge between the data and those who need to learn something from it, or make decisions based on its analysis. By rethinking the way we use data and understanding our audience, we can create meaningful stories that influence and engage the audience on both an emotional and logical level.

For more on Data Visualization, see Data Stories.

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