

5 Best Practices for Telling Great Stories with Data

And why it makes you a better analyst



Providing facts to management can be a big job to navigate

If you want to explain better about what your team is doing, start with building a story.

Every one who has data to analyze has stories to tell, whether it's diagnosing the reasons for manufacturing defects, selling a new idea in a way that captures the imagination of your target audience or informing colleagues about a particular customer service improvement program. And when it's telling the story behind a big strategic choice so that you and your senior management team can make a solid decision, providing a fact-based story can be especially challenging. In all cases, it's a big job. You want to be interesting and memorable; you know you need to keep it simple for your busy executives and colleagues. Yet you also know you have to be factual, detail-oriented and data-driven, especially in today's metriccentric world.

It's tempting to present just the data and facts, but when colleagues and senior management are overwhelmed by data and facts without context, you lose. We have all experienced presentations with large slide decks, only to find that the audience is so overwhelmed with data that they don't know what to think, or they are so completely tuned out, they take away only a fraction of the key points.

Start engaging your executive team and explaining your strategies and results more powerfully by approaching your assignment as a story. You will need the "what" of your story (the facts and data) but you also need the "who?", the "how?", the "why?" and the often missed "so what?". It's these story elements that will make your data relevant and tangible for your audience. Creating a good story can aid you and senior management in focusing on what is important.

Why story?

- Make sense and order
- See the whole where there disparate parts
- Give vision to what the future can look like
- Interactive—people put themselves into stories
- Make your job easier

Stories bring life to data and facts. They can help you make sense and order out of a disparate collection of facts. They make it easier to remember key points and can paint a vivid picture of what the future can look like. Stories also create interactivity—people put themselves into stories and can relate to the situation. Cultures have long used storytelling to pass on knowledge and content. In some cultures, storytelling is critical to their identity. For example, in New Zealand, some of the Maori people tattoo their faces with mokus. A moku is a facial tattoo containing a story about ancestors, family tribe. A man may have a tattoo design on his face that shows features of a hammerhead to highlight unique qualities about his lineage. The design he chooses signifies what is part of his ‘true self’ and his ancestral home.

Likewise, when we are trying to understand a story, the storyteller navigates to finding the “true north.” If senior management is looking to discuss how they will respond to a competitive change, a good story can make sense and order out of a lot of noise. For example, you may have facts and data from two studies, one including results from an advertising study and one from a product satisfaction study. Developing a story for what you measured across both studies can help people see the whole where there were disparate parts. For rallying your distributors around a new product, you can employ story to give vision to what the future can look like. Most importantly, storytelling is interactive—typically the presenter uses words and pictures that audience members can put themselves into. As a result, they become more engaged and better understand the information.

So What Is a Good Story?

Most people can easily rattle off their favorite film or book. Or they remember a funny story that a colleague recently shared. Why do people remember these stories? Because they contain certain characteristics.

First, a good story has great characters. In some cases, the reader or viewer has a vicarious experience where they become involved in the character. The character then has to be faced with a challenge that is difficult but believable. There must be hurdles that the character overcomes. And finally, the outcome or prognosis is clear by the end of the story. The situation may not be resolved—but the story has a clear end-point.

A real-life application will help to provide a tangible example. A marketing consultant was involved in a large quantitative customer study conducted to understand what drove customer relationship satisfaction. After measuring over 20 different attributes across thousands of customers, there were some attributes that really stuck out. She could have chosen to just put together a slew of charts to present the findings, but she really wanted this information to resonate with the leadership of this business. This information was going to feed into their brand promise.

She decided to tell the story of the survey data by telling a personal story about her life—about a week when she had to care for her 4-year old nephew. By this time, she had already established herself as a character the audience cared about. She shared a difficult but believable challenge—watching an energetic 4 year old for the week. After days of dealing with the hurdles of “what would his mom do?”, this consultant followed his routine as best as she could and ended the week with a positive outcome—her nephew was happy and healthy. When he saw his mom, he told her that he enjoyed his visit with his aunt because she picked him up everyday from preschool on time, she washed his favorite Thomas-the-Train shirt as promised, and after nap time, she followed up to see if he needed some chocolate milk. As you can conclude, the key drivers from this study were being on time, doing things as promised, and following up. Telling the findings of the research study in this way made the data visualization memorable.



- A good story or movie involves characters
- Challenge is believable
- There are hurdles to overcome
- Outcome or prognosis is clear

Presenting data does not always equate with a good story

The case above is interesting because behind the story is a detailed, highly quantitative study. The story is simple but the analytical findings are not. She was able to present these highly analytical findings in an interesting and compelling way. Yet, frequently the opposite happens. A presentation filled with important data becomes boring, forgettable, and unclear.

This happens easily because presentations are structured before the story (with its dramatic findings) is discovered. In other words, the focus is on the presentation's form above the content. We show a chart of sales by region, then a chart of sales by product line, etc., missing the big picture. For example, in Figure 1, is this really just "Sales by Region"? Or is there a bigger story about the West Region growing substantially over the last period? The focus on rapid growth in the West is far more dramatic and memorable than listing numbers by period for each region.



Figure 1



The shortest distance between truth and a human being is a story.

– ANTHONY DE MELLO, ONE MINUTE WISDOM

1

Think of your analysis as a story— use a story structure

When crafting a data-rich story, the first objective is to find the story. Who are the characters? What is the drama or challenge? What hurdles have to be overcome? And at the end of your story, what do you want your audience to do as a result?

Answering these questions obviously starts with analyzing the data and uncovering your findings. Whether it is a large dataset, a quick pulse survey, or a competitive piece of data, think about the key questions you are trying to answer. The more thoroughly you can explore your data, the more likely you'll find the dramatic insights that make for a great story. You may want to workshop with your team about what the findings are. Use a software application like Tableau to accelerate your analysis time and give you the chance to examine your data more closely and in many more relevant ways.

Once you know the core story, craft your other story elements: define your characters, understand the challenge, identify the hurdles and crystallize the outcome or decision question. Make sure you are clear with what you want people to do as a result. This will shape how your audience will recall your story.

With the story elements in place, write out the storyboard which represents the structure and form of your story. Although it's tempting to skip to this step, it is better first to understand the story you are telling and then to focus on the presentation structure and form.

Once the storyboard is in place, the other elements will fall into place. The storyboard will help you to think about the best analogies or metaphors, to clearly set up challenge/opportunity, and to finally see the flow and transitions needed. The storyboard also helps you focus on key visuals (graphs, charts and graphics) that you need your executives to recall. Keep your slides to a minimum, and if more detail or background is needed, you can make an appendix available for reference. A good practice is that the more senior your audience, the fewer the slides you need.

- Find the story first: explore the data
- Determine what you want people to do as a result
- Write out the “story board” for your audience

2

Be authentic... your story will flow

Your audience wants to connect with you, they want you to be memorable and real. Remember, they have probably heard or read too many lengthy, boring and downright fabricated presentations and documents. So be yourself and be true to your story. To best capture your audience's attention, consider how you can take a data fact and make it personal, relatable and—if you're lucky—emotional. Is there a metaphor or anecdote to make the data more memorable and specific? This will help them take notice. Does your audience like competitive sports? Then try use a sailing analogy. Again, this will help your audience connect to your message.

- Make it personal, make it emotional
- Start with metaphor or anecdote
- Develop with data: authenticity is rooted in facts and facts are rooted in data
- Supplement hard data with qualitative data

Take your story and develop it with data. Authenticity is rooted in facts. Facts are rooted in data. Since you've already reached them personally and captured their attention with a metaphor, now is the time to selectively present core facts and data that prove your point. You can then supplement hard data with qualitative data. In one study about a new product concept, an executive was asked to share insight on the habits and lifestyles of a segment for a food related product. The data from the study revealed that the new product concept could be very useful. Instead of just presenting data about consumers' likelihood to buy, this executive also showed photos of disorganized, cluttered & messy kitchens to help demonstrate how bad the problem really was.

3

Be visual—think of yourself as a film editor

Symbols and pictures are effective communication devices. In one look, the viewer instantly assesses the message and can focus on the meaning. On the other hand, tables of data or numbers require people to look at each number, compare and contrast it to other numbers and then draw conclusions about the message. It is more work for the viewer when you use text. A well-chosen and well-crafted visual easily tells the story in a single glance.

This is especially true when you have to present facts and data that were not great news for your audience. For example, if you have to communicate information about a fast encroaching competitor, a graphic image showing a predator on the trail of its prey may be more effective than a table of declining numbers. The visual image conveys the problem and the imminent danger. It also advances the discussion—from this image, you can talk about recommendations about what to do next. In this case, you can use the image as a metaphor.

- Use pictures, graphs, charts when possible
- Design your graphs and charts for instant readability but allow for layers of meaning as the graph is studied

The Residential Mortgage Market

Company	Top Residential Originators					
	First half of 2004 versus first half of 2003 (dollars in millions)		Percent 2004 Market		2003 Market	
	Total 2004	Total 2003	Change	Share	Share	Change
Countrywide Financial Corp., California, CA	\$175,867	\$22,613	-24.6%	12.2%	13.2%	-0.9%
Wells Fargo Home Mortgage, San Francisco, CA	\$160,223	\$27,861	-32.3%	11.2%	13.4%	-2.2%
Washington Mutual, Seattle, WA	\$136,477	\$24,892	-41.8%	9.5%	13.7%	-3.4%
Chase Home Finance, Boston, MA	\$64,241	\$39,283	-32.2%	4.6%	7.2%	-2.6%
Comcast, Inc. O'Fallon, MO	\$53,865	\$47,566	11.7%	3.9%	2.6%	1.0%
Bank of America, Charlotte, NC	\$52,304	\$1,301	-28.3%	3.8%	4.6%	-0.5%
GMAC, Pittsburgh, PA	\$42,031	\$5,178	-28.0%	2.9%	3.5%	-0.2%
AEH Auto Mortgage, Ann Arbor, MI	\$34,113	\$7,278	-63.1%	2.3%	4.1%	-1.7%
National City Mortgage, Columbus, OH	\$33,752	\$8,688	-42.4%	2.3%	3.3%	-0.9%
Capital Mortgage, Mount Laurel, NJ	\$25,893	\$4,165	-29.4%	1.9%	2.3%	-0.3%
Other Top 10	\$11,859	\$1,046	-27.4%	0.8%	6.0%	-5.7%
Top 50	\$1,128,223	\$1,664,113	-29.1%	82.2%	94.2%	-13.1%
Total Non-Year Production	\$1,433,000	\$1,796,225	-18.4%	100.0%	100.0%	NA

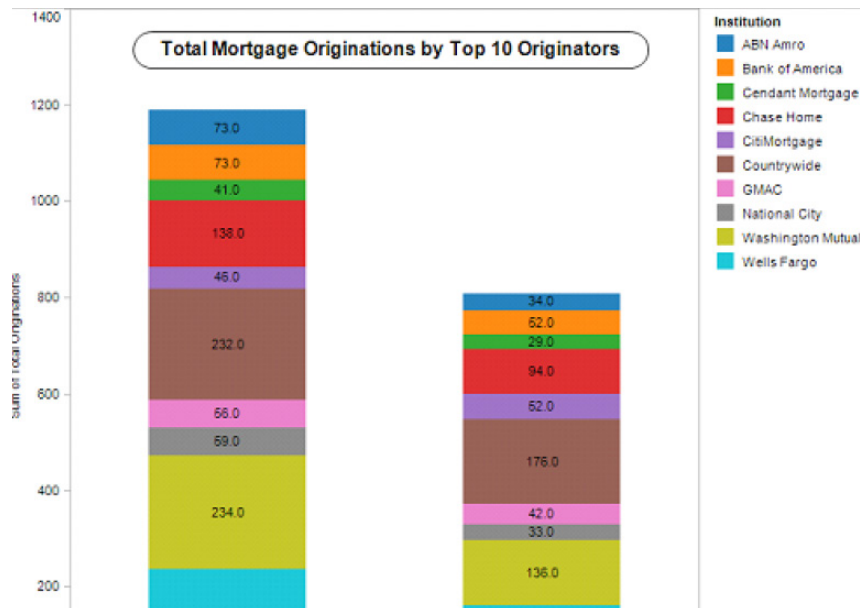
Source: American Banker - Publication of October 12, 2004

Notes:

- The market is highly concentrated at the top – 10 ten firms originate and service about 80% of all loans. The top 50 firms originate and service about 80% of all loans.
- This concentration occurred mainly through a wave of mergers and acquisitions that have taken place over the past several years.
- Many believe that further consolidation will occur at the top – with the top ten becoming the top five
- Six of the top ten firms are IXI clients – but, the mortgage operations are typically independent of other operations – hence, it is uncertain how much benefit will accrue from existing relationships.
- Originations are down across the industry – average decrease is 30% for the top 50 firms.

Does this mean you have to find art or images to convey your key point? Absolutely not—a good story does not mean there are no data charts. In fact, it's quite the contrary. The presentation of statistics and data are often essential to a good story. The key is to create well-formed visual analysis, charts and graphs.

What is a well-formed visual analysis? Let's start with what it is not. It is not a table of data or an overly complex chart with multiple bullet points. As Figure 2 shows, a table of data with explanatory bullets may be useful for reference but your audience is not going to easily identify the key point.



The above graph contains virtually the same data but the message is much more clear and conclusions easier to draw. The title is descriptive. The chart facilitates a quick read at first glance— mortgage originations declined from one year to the next. But the visual also layers in additional information without detracting from the main message. There is data clearly delineated by color about the top originators and how they performed year over year. It's easy to see how the size of each colored square changed—indicating the loss in originations.

Sometimes, you need to look at your data in multiple ways before determining the most effective presentation. This chart could easily have been a line chart. But the stacked bar chart is a more useful and direct presentation. By using analytical tools like Tableau Software which make it easy to visualize your data in multiple ways, you can create meaningful and attractive visuals to accompany and drive your story forward.

4

Make it easy for your audience and you

Story-telling makes the process of communication easier. Your audience will recall the key message and can act on it. Of course, this means that you haven't buried them in too many issues and stories. Multiple stories within one overall presentation or document are fine but realize that the human brain typically cannot hold more than three to five major facts or concepts. If you're also asking people to analyze information on the fly and draw their own conclusions, you are likely requiring your audience to jump through too many hoops. In the end, you risk losing them. Being simple and direct will take you much further.

Concentrating on the story will also make your job easier and faster—in both creating your presentation or document and in communication. The benefits of storytelling memorability, reliability, directness, comprehension, effective visualizations—all apply to the creation of the story, not just the delivery.

- Telling a story should be simple and direct. Recall and action will be that much stronger
- Stick to 2-3 key issues and how they relate to your audience
- No hoop jumping

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- Focus on highlighting what the audience needs
- Highlight key facts that relate to the story—the current state, rate of change, a key number. How does this link to story’s trend?
- Extend the story parameters into questions
- Invite them to continue the discussion via group discussion, blogs, intranets, newsgroups

Invite and direct discussion

The payback that comes with a great story is that it gets people talking and sharing their points of view. When people come out of movies that moved them in some way, the first thing many of them want to do is talk about it. It is the same impact when you tell a great story with data. Give your audience the tools they need to talk about and advance your story. This includes reminding them and directing them to your key points. Extend the story into questions. Be sure and suggest means of continuing communication after you’ve left your audience or once the presentation is finished. Technology makes this easy with blogs, discussion groups, intranets and many other choices. For example, Tableau Server is can help you share your visual analytics with colleagues anywhere in the world via the Internet.

Conclusion

Cited at the beginning is Anthony De Mello’s quote, “The shortest distance between truth and a human being is a story” because this simple quote carries with it a lot of meaning. Growing up, you probably learned many basic life lessons from stories. Whether it was Aesop’s fables, fairy tales, the Bible or even Saturday morning cartoons, stories played a key role in communicating important information about how to behave and what to expect. Now as adults, you can navigate the journey for your audience and bring the benefits of storytelling to your presentations by adhering to these five best practices:

1. Think of Your Analysis as a Story—Use a Story Structure
2. Be Authentic... Your Story will Flow
3. Be Visual—Think of Yourself as a Film Editor
4. Make it Easy for Your Audience and You
5. Invite and Direct Discussion

So don’t be afraid to use data to tell great stories. Being factual, detail-oriented and data-driven is critical in today’s metric-centric world but it does not have to mean being boring and lengthy. In fact, by finding the real stories in your data and following the best practices above, you can get people to focus on your message—and thus on what’s important.

About Tableau

Tableau Software helps people see and understand data. Ranked by Gartner and IDC in 2011 as the world's fastest growing business intelligence company, Tableau helps anyone quickly and easily analyze, visualize and share information. More than 9,000 companies get rapid results with Tableau in the office and on-the-go. And tens of thousands of people use Tableau Public to share data in their blogs and websites. See how Tableau can help you by downloading the free trial [here](#).

Additional resources

To come

To come

To come

To come

