Harvard Business Review

Digital Article

Analytics and Data Science

How to Give a Data-Heavy Presentation

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Published on HBR.org / October 16, 2015 / Reprint H02FHD

Data storytelling has become a powerful part of the communications toolkit, allowing both journalists and marketers to communicate key messages by using data and data visualization to drive articles, blog posts, and reports. But the power of data storytelling isn't limited to written communication: you can also use data to deliver presentations that are both more credible and more visually compelling.

Knowing how to develop and deliver a data-driven presentation is now a crucial skill for many professionals, since we often have to tell our colleagues a story about the success of a new initiative, the promise of a new business opportunity, or the imperative of a change in strategy — stories that are much more compelling when they're backed by numbers.

In the past four years, data has become a bigger and bigger part of my own presentations, since I frequently speak about data-driven projects like the new rules for the collaborative economy, and what social media analytics can't tell you about your customers. I've enjoyed the luxury of working closely with data analysts, infographic designers, and my own in-house speechwriter, which has helped me pick up some tricks on what it takes to create a successful data-driven presentation.

As with any communication, start by thinking about your audience. Who are you presenting to, and how much do they know about the

topic? If you're presenting data on three different sales strategies to the sales team that's been testing those approaches, you can plunge right in and show them what worked. If you're reporting on that same experiment to another part of the organization, you need to provide a lot of context before you drop the bar charts in their laps; otherwise what looks like a clear story to you may simply confuse them. A good rule of thumb is to look at the legend on your charts: if you can't count on the audience knowing what each item in the legend actually refers to, you need to spend some time on setup before you get to the numbers.

It's easy to let the data overtake your presentation, so be sure you know the overall story you're trying to tell, and use charts sparingly to support your story. You're not trying to subdue your enemy through the sheer volume of data you can bring to bear on your argument; you're using data strategically, when it provides clear and concrete evidence for the story you're telling. I've found that audiences get overwhelmed by back-to-back data slides, so I try to intersperse charts with slides that convey my key point using images or a very few words of text. Show a photo of a shopping cart, and tell people that you now know which cash register displays are most likely to yield impulse purchases; *then* show the chart displaying the sales figures for different items. Follow that chart with an image or a few short bullets that emphasizes the actionable insights and implications of your data.

It's rare that anyone will retain all the actual numbers in your presentation, so think about the *words* that capture the idea, insight, or conclusion you want them to hold onto. Instead of simply throwing up a bar chart that shows levels of employee engagement versus different working arrangements, build to that key chart with a story about the impact of working arrangements on employee satisfaction — illustrated by actual human examples, if possible.

And if there is a single number that really captures your key point — like "employees who work from home 1 day per week are 30% happier than the rest of our workforce" — then make not just that chart, but that specific data point very prominent in your deck. Highlight it in the relevant chart, and consider giving that single data point its own slide or bullet in your conclusion.

As you present, remember that it takes people some time to digest a chart or data table. Take the time to spell out the story you see in the data so that it's clear to someone who *hasn't* been poring over that dataset for the past six weeks. A simple statement like "in every region except the Southwest, email outperforms phone calls as a way of generating leads; in the Northeast, 5% of emails get a response, versus only 3% of phone calls" will help people understand what they are looking at and how they're supposed to read your chart. Speak slower than you usually do, and consider pausing for a moment mid-chart, to allow people the time to absorb the data; even if you prefer to wait until the end of your presentation for questions, ask if anyone needs you to clarify the chart.

While clarifying statements are helpful, that doesn't mean you can neglect the visuals. If all you do is produce your charts with a tool like Infogr.am or Tableau — both of which will produce charts that look a heck of a lot better than what Excel spits out — you'll immediately improve your data-driven presentations. You may still need to restructure or reformat your charts to make them work on screen, however. Even if you've used shading to differentiate between categories in a printed document, it will be easier for people to distinguish between on-screen categories if they're shown in different, contrasting colors.

Make sure your legend and data labels are printed in a large, visible font; if you've used an infographic design tool like Infogr.am, which generates beautiful charts but doesn't let you adjust font sizes, you'll have to add your own, larger labels when you're producing your final deck. (My trick is to create those labels as individual text boxes in the color of my chart columns, so I can drop them on top of my columns and hide the original labels.)

If you don't have the support of an infographic designer in creating your charts, get familiar with the very basic rules of good data visualization, like which types of charts to use for different purposes. And make sure that you don't violate any data visualization principles when you squeeze your data onto a slide: if you simply can't fit your entire chart onto a single slide in a way that is readable, it's better to show highlights than to compromise the clarity of your data. A column chart that shows eight categories of clustered columns is going to be very crowded — but don't you dare turn it into a set of pie charts instead: if there's value in comparing categories, you want to keep that as a bar chart where all the categories are aligned on a single base line. Perhaps you don't *really* need to show all eight categories — just the five most important ones. Or maybe you will have to break your chart into two successive slides; if so, organize your categories so that the most closely related categories are kept together on each slide.

Lastly, there is a lot of value in leaving people with a physical (or virtual) copy of your charts, so that they can look at the numbers more closely after your presentation. Since data-driven decks and reports tend to get circulated, make sure that any charts you include can stand on their own, without you speaking to them: note the source of your data, make your legend clear, and annotate your charts with callouts that show people how to make sense of a specific data point ("7 in 10 customers chose the blue package").

If this is starting to sound daunting, don't let a vision of the ideal data-driven presentation report keep you from using data to present your work or ideas to colleagues or peers. With data storytelling, excessively high standards can keep us from seizing the opportunity to make a good story better by backing it up with quantitative evidence.

You don't have to have the perfect dataset or the world's most beautiful infographics to make data storytelling a valuable part of your communications toolbox. All you need is to break down the wall that keeps math in one part of your brain, and storytelling in another.

This article was originally published online on October 16, 2015.

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