Data Storytelling: An Art and a Science

Lynne M. Wester
Today we’ll talk about:

• Using data to tell Stories
• Why data and text alone fail
• Steps to success
• Positive examples
WHAT IS DATA STORYTELLING?

The ability to take data—to be able to understand it, to process it, to extract value from it, to visualize it, to communicate it
Why stories?

• For thousands of years, storytelling has been an integral part of our humanity.

• Throughout time, storytelling has proven to be a powerful delivery mechanism for sharing insights and ideas in a way that is memorable, persuasive, and engaging.

• Analysis of the most popular 500 TED Talk presentations found that stories made up at least 65% of their content.
Data Alone
WHY DATA ALONE FAILS

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BUT 3 THINGS ARE UNCLEAR ON MOST DASHBOARDS

What QUESTION does the dashboard answer?

Is the ANSWER evident from the dashboard?

What ACTION should the user take now?
WHY WORDS
ALONE FAIL
Steps to Success
STEP 1: COLLECT DATA
STEP 2:
Pick numbers that resonate
STEP 3:
Think about the point
STEP 4: Deliver the news
Articles featuring infographics receive 72% more views than normal articles.
Selecting the Optimal Visuals
1. Data Collection
2. Data Preparation
3. Data Visualization
4. Data Analysis
5. Data Storytelling

www.effective datasstorytelling.com
CHOOSE THE RIGHT CHART

Compare values:
- Bar chart
- Line chart

Show the individual parts that make up a whole:
- Pie chart
- Stacked bar
- Stacked column

Analyze trends:
- Line chart
- Bar chart
Under President Obama, more students are earning their high school diplomas than ever before.

High School Graduation Rate:

- 2007-08: 75%
- 2008-09: 75%
- 2009-10: 78%
- 2010-11: 79%
- 2011-12: 80%
- 2012-13: 81%
- 2013-14: 82%

Source: U.S. Department of Education, National Center for Education Statistics

#LeadOnEducation
MATH is important

BIGGEST FUTURE CHANGES IN THE WORKPLACE?

In a survey of HR professionals, changes forecasted in the workplace varied from:

- 73%: Employers competing on high flexibility rather than salaries
- 69%: Employees will be paid on output rather than hours worked
- 46%: Treadmill desks being common place to combat sedentary office life
Nearly half of all newborn, maternal and stillborn deaths can prevent more than 2/3 of these deaths.

- 24 hour care from a trained health worker
- Keeping the baby warm and dry through kangaroo care
- Proper hygiene
- Immunization & antibiotics to treat infections
- Immediate breastfeeding

The first 48 hours of childbirth.
Let’s Explore this example
If this **bucket** represents all the world's water

then this **cup** represents the amount of potential fresh water

however, just **one teaspoon** of that is available for us to use, via lakes, rivers and underwater reservoirs as groundwater

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*WaterAid*

Beneath the Surface: the State of the World’s Water 2019
Free Design Resources

- Canva
- PowerPoint
- DesignWizard
- AdobeSpark
- Picmonkey.com
- Pictochart.com
- Drawtify.com
Tools of the Trade

- Tableau
- Excel
- Google Data Studio
- Datawrapper
- Infogram
- FusionCharts
- Venngage
- Piktochart
ORGAN & TISSUE DONATION FACTS

21 People die each day awaiting a transplant. = ONE organ donor can save EIGHT lives.

ONE tissue donor can enhance the lives of 50+ people. = Every 10 MINUTES, someone is added to the transplant waiting list.

Cost to donors or their families $0
World's Deadliest Animals

Number of people killed by animals per year

- 10,000 Freshwater snail (schistosomiasis)
- 10,000 Assassin bug (Chagas disease)
- 10,000 Tsetse fly (sleeping sickness)
- 25,000 Dog (rabies)
- 50,000 Shark
- 475,000 Human
- 735,000 Mosquito

SOURCES: World Health Organization, Centers for Disease Control and Prevention, and other reputable sources.
Key points to keep in mind

- Storytelling is Essential
- Use Data Wisely
- Select the Right Chart
- What do you want your outcome to be?
- Be selective with data- don’t overwhelm
- Good, Better, Best
- Practice makes Perfect!
Contact Us

Lynne Wester
Lynne@donorrelations.com

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