

DOMO

Introduction to Data Storytelling



Two Important Skill Sets: Data Analysis

There are two important skill sets to develop as a data professional:



Data Analysis:

The process of systematically applying statistical and/or logical techniques to describe and evaluate data



Skills:

- Data gathering, cleaning, transformation, and processing
- Statistical modeling & mathematical calculations
- Data visualization
- Mastery of programming languages & BI tools



Two Important Skill Sets: Data Storytelling

There are two important skill sets to develop as a data professional:



Data Storytelling:

The process of translating data analyses into understandable terms in order to influence business decisions or actions



Skills:

- Communicating why the analysis and findings are relevant or important
- Describing how to leverage the findings for more intelligent decision-making and action.
- Crafting the message to address the needs and priorities of the specific audience
- Recognizing what's important to share and what's not, with the aim of keeping things simple



The Value of Data Storytelling



Data storytelling is a skill set that is often overlooked by beginning data professionals in favor of data analytics. Yet, *the ability to tell a story with data is what separates a mediocre data professional from an impactful one.*



It's not enough to be able to analyze data; you need to know how to communicate the story it tells in a clear, compelling manner.



Data storytelling is a soft skill which, similar to the hard skills of data analysis, can be developed over time.

Data Storytelling 101

Topics of discussion:



Know your audience



Five steps of successful
data storytelling



Developing your data
storytelling skills

Know Your Audience



The story you tell should be crafted to your specific audience — whether it's a colleague, a customer, or a boss — so they're able to take away the right insights and initiate appropriate actions.

When storytelling, take into account your audience's:

- **Familiarity with data and statistics** - What is the best way to explain concepts so they will understand?
- **Priorities** - What do they care about?
- **Likely response to the analysis** - What insights would be useful to them?
- **Time** - How long do you have to tell this story to them?



5 Steps of Successful Data Storytelling



Successful data stories address and answer five questions:

Step 1



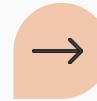
What is the question you are trying to answer with your analysis?

Step 2



Why is this question important?

Step 3



What data & analysis techniques did you use to answer this question?

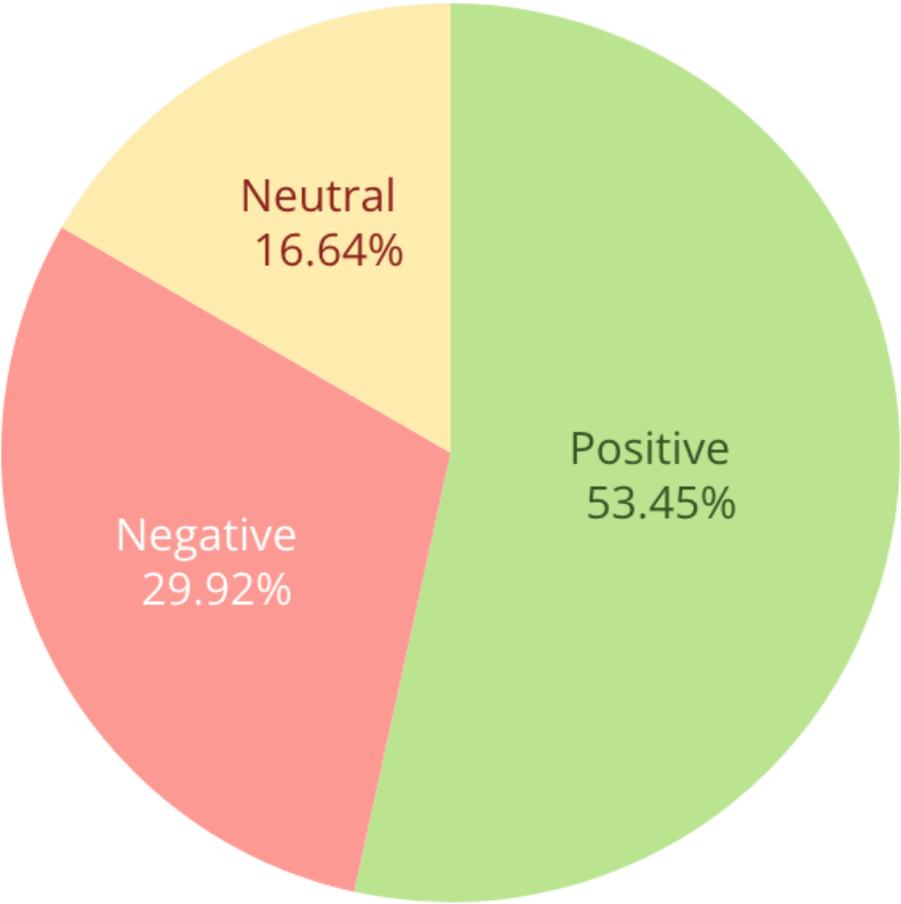
Step 4



What did you find?

Step 5

What action do you recommend based on these findings?



1. What is the question you are trying to answer with your analysis?

At the beginning of your story, clearly establish what question you were trying to answer with your analysis.

Your question should be:

- **Succinct** - 1 sentence or less
- **As specific as possible**- use precise language
- **The one you actually explored in your analysis** – don't start your story by posing a question you don't answer!



You will be judged by your audience on how well you answer this question by the end of the story

2. Why is this question important?

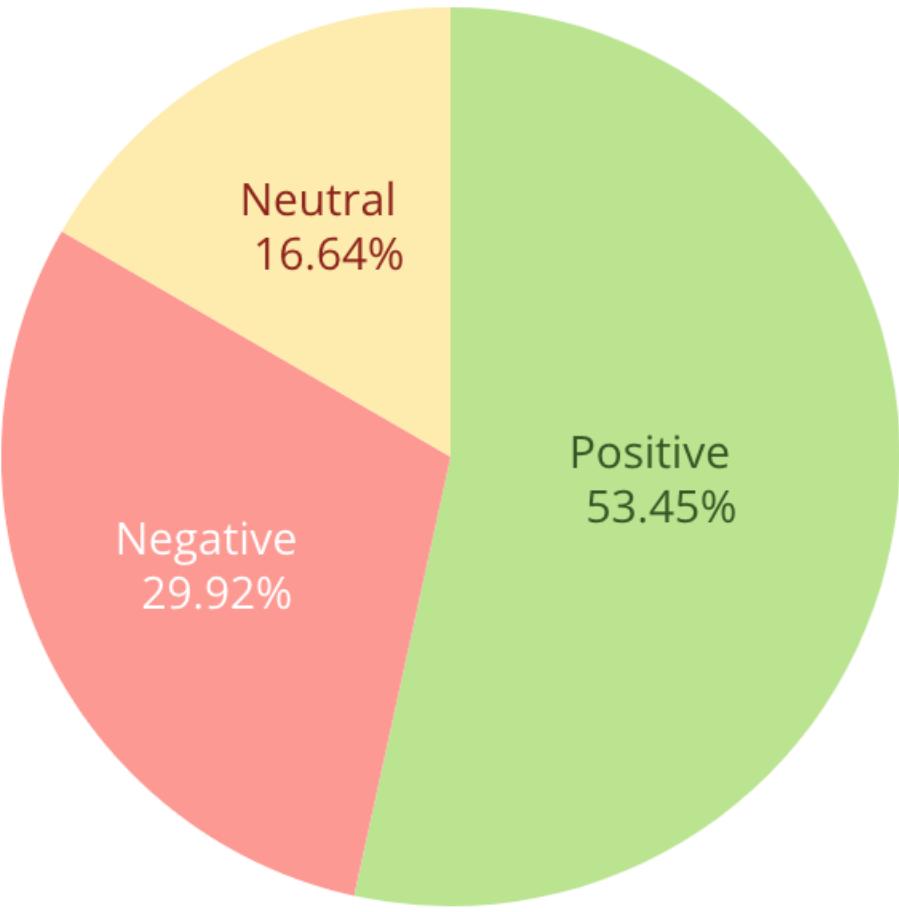
Establish with your audience why the question is worth answering:

- This is your chance to build interest in your question and make people want to pay attention to your story - and not tune you out or stop reading your emailing.
- Emphasize why this question is important or relevant *to your audience*
 - If your question is not relevant to them, there's no point in continuing your story about what you found!

Things to mention or consider:

- What problem answering your questions solves
- What the benefits are of answering your question
- What lead you to ask this question







3. What data & analysis techniques did you use to answer this question?

After you've established what your question is and why it is important, then you *describe what data you used and which specific analysis techniques to answer your question.*

Possible things to mention about your *data*:

- Source of the data
- Sample used in your analysis.
- Operationalization of key measures

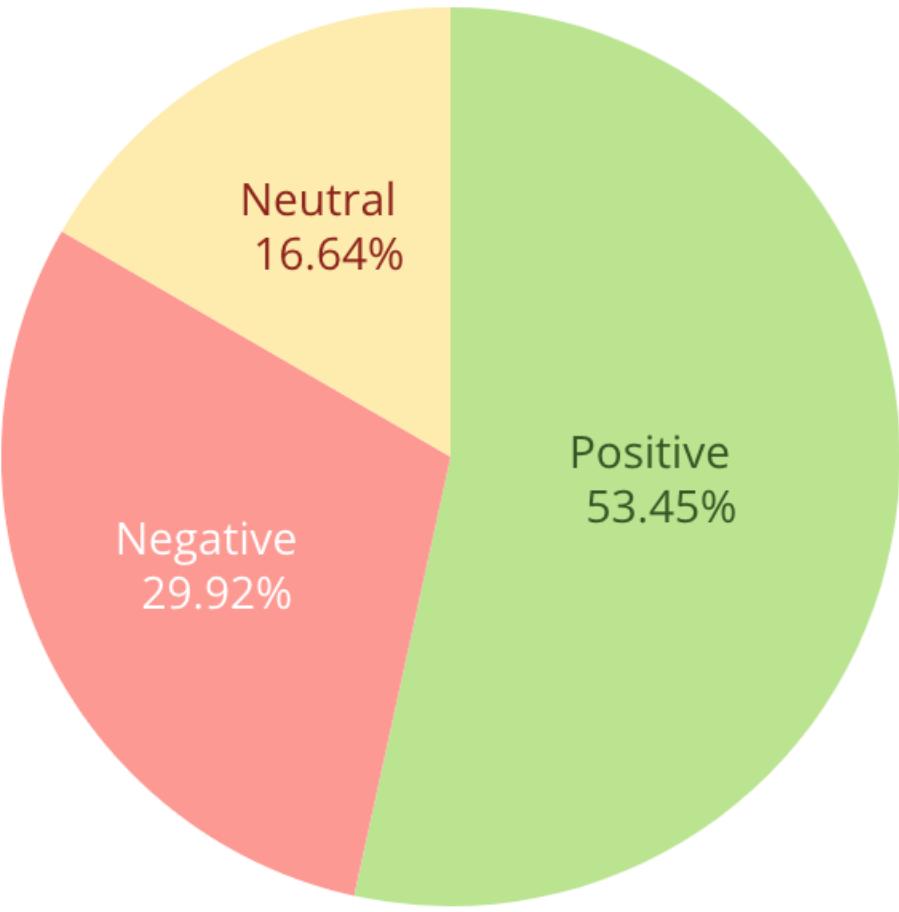
Possible things to mention about *analysis techniques*:

- Statistical methods used
- What specific variables were used in the analysis

4. What did you find?

Explain the results of your analysis verbally, visually, and/or in writing

- Make sure the results you share actually answer or directly relate to your research question while being as succinct as possible.
 - If using figures/tables, show the minimum number required to get your point across.
 - Have a clear, key message associated with each figure/table.
- Use language to describe your results that your audience will understand. Speak or write to them on their level.



4. What did you find?

IMPORTANT! When sharing your findings, don't "cherry-pick" your results!

- Cherry-picking refers to the selective presentation of data or results that support a particular hypothesis or desired outcome.

5. What action(s) do you recommend based on these findings?

Always end your story with actionable recommendations or next steps.

1

Effective recommendations based on research findings serve as a bridge between knowledge and action. Help your audience understand how to leverage your results!

2

Providing recommendations is a way to show that you are problem-solver, not just a human calculator.



Developing Your Data Storytelling Skills



Practicing data storytelling skills is essential for honing your abilities and becoming a more effective communicator. Here are some practical tips to help you practice and improve your data storytelling skills:



Practice the five steps of successful data storytelling whenever you write an email about a project/analysis or informal meetings when you're discussing your work. Every time you communicate about data or analyses is a chance to practice data storytelling.



Use various data visualizations to explore different ways of presenting data. Experiment with charts, graphs, infographics, and interactive visualizations to find the most effective ways to convey your insights and to improve your design abilities.



Take ownership of your knowledge of the data. If you did the data analytics portion well, no one will know the data and the analysis better than you do!