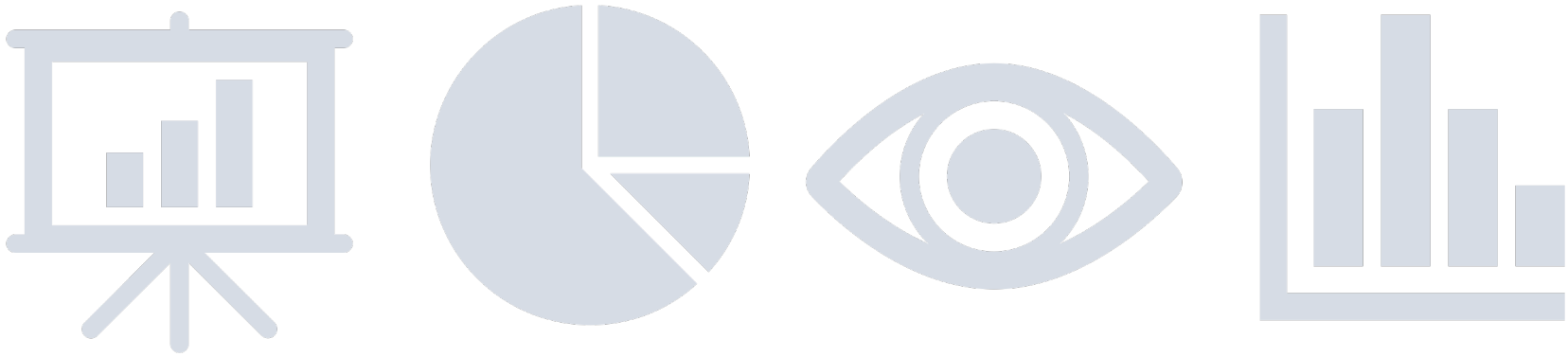
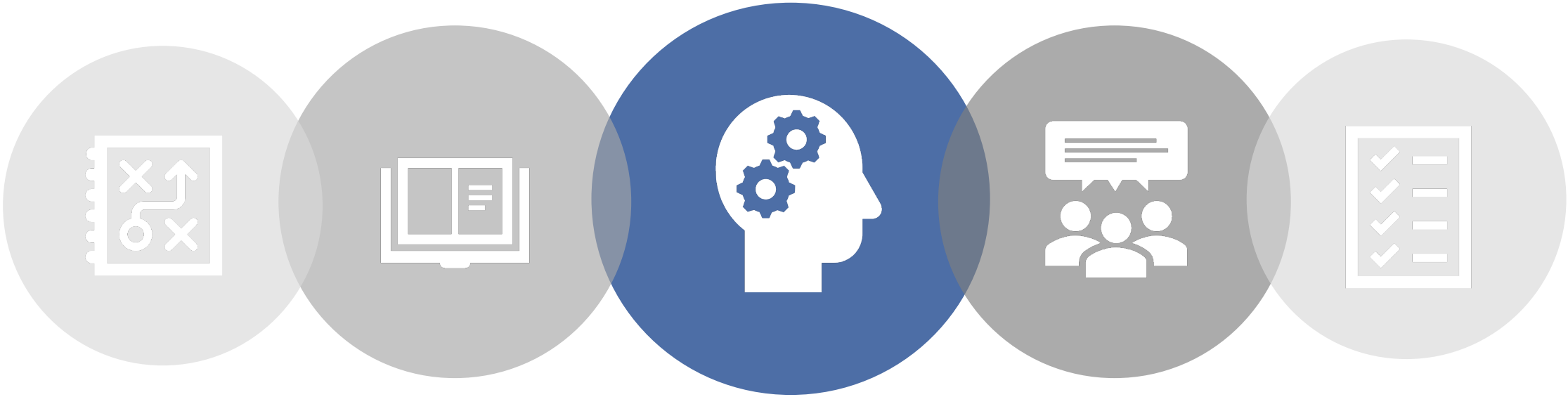
A GUIDE TO EFFECTIVE DATA STORYTELLING

Tips and tricks on how to capture audiences using data and visualizations.



Agenda



1

Why
data visualization is important in marketing

2

Data Storytelling

3

My Process

4

Tips

5

Moving Forward

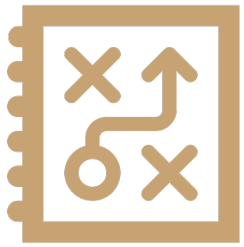
Data Visualization + Marketing

Your data may hold tremendous amounts of *potential value*, but *not an ounce of value* can be created unless insights are uncovered and translated into actions or business outcomes.

Forbes

Stakeholders are looking for actionable insights rather than heaps of data with no concrete action steps.

Data visualization also helps stakeholders and decision-makers easily understand the meaning of data to drive business decisions.



Insights and analyses derived from crunching volumes of data - unless presented **succinctly** with **effective visuals** and **tied to business goals** - never captures the attention of business oriented folks/decision makers

Data Storytelling

What actionable insights can we convey with our data?

> **Contrary to popular belief, data storytelling is not simply data visualization, analytics reporting, or a handful of stats sitting in a PowerPoint somewhere. Data storytelling is the blending of two worlds: hard data and human communication. It's a compelling narrative crafted around and anchored by compelling data.**

Retention

Information visually processed makes it easier to recall later.

Comprehension

Our brains are hardwired to ***process visuals faster*** than language. Being able to “see” the data makes it much easier to understand. Coupled with language-based context, data comes to life.

Appeal

Data visualization is visually stimulating, making the ***content more attractive*** to the viewer.

Common Issues:

Presentations having such sparse information, so that no one knows what you're trying to say.

On the other end, presentations are so wordy the audience gets exhausted and impatient before you get to the main point.

How can we find a balance between the two?

My Data Storytelling Process

How to build a story around a main idea

My Data Storytelling Process

1

Reemphasize the PURPOSE of the project

What exactly do we want to convey to our target audiences? Reflect on the business goals you want to target.

2

What's the data about?

Read through the data summary document (many times), then read through all the excel sheets to understand everything in order to pick out most important points.

3

Pick the most important points

We can't include everything in data storytelling. While every part in our data analysis is important, it'll bore the audience. Pick 5 of the main data points that support the story we're trying to tell, put the rest in appendix for context.

My Data Storytelling Process

4

Think first from the beginning and the end.

What background information does our audience need to know about why we're conducting this analysis? What do we want the takeaways to be? Then fill in necessary information and data points in the middle. Also think about: Why did we do this analysis? How will it help our company? What was the purpose? Who will it affect?

5

Intro Slides – 3 or less

Include necessary background information, but keep it short. We don't want to bore the audience before we get into the main data story.

6

Graphics, graphics, graphics

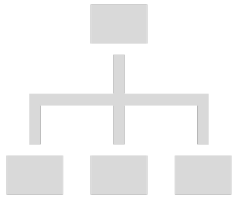
This goes back to the point of visual appeal – data visualization is visually stimulating, making the content more attractive to the viewer. Don't bombard the presentation with words. Instead, show it through ***professional, cohesive*** visuals, then explain the story verbally.

Changing Themes/Topics: four elements to consider

Make a strong conclusion for every topic

Build anticipation throughout the presentation to keep your audience engaged.

Put the title clearly on the slide



Enhance the presentation by breaking it into sections

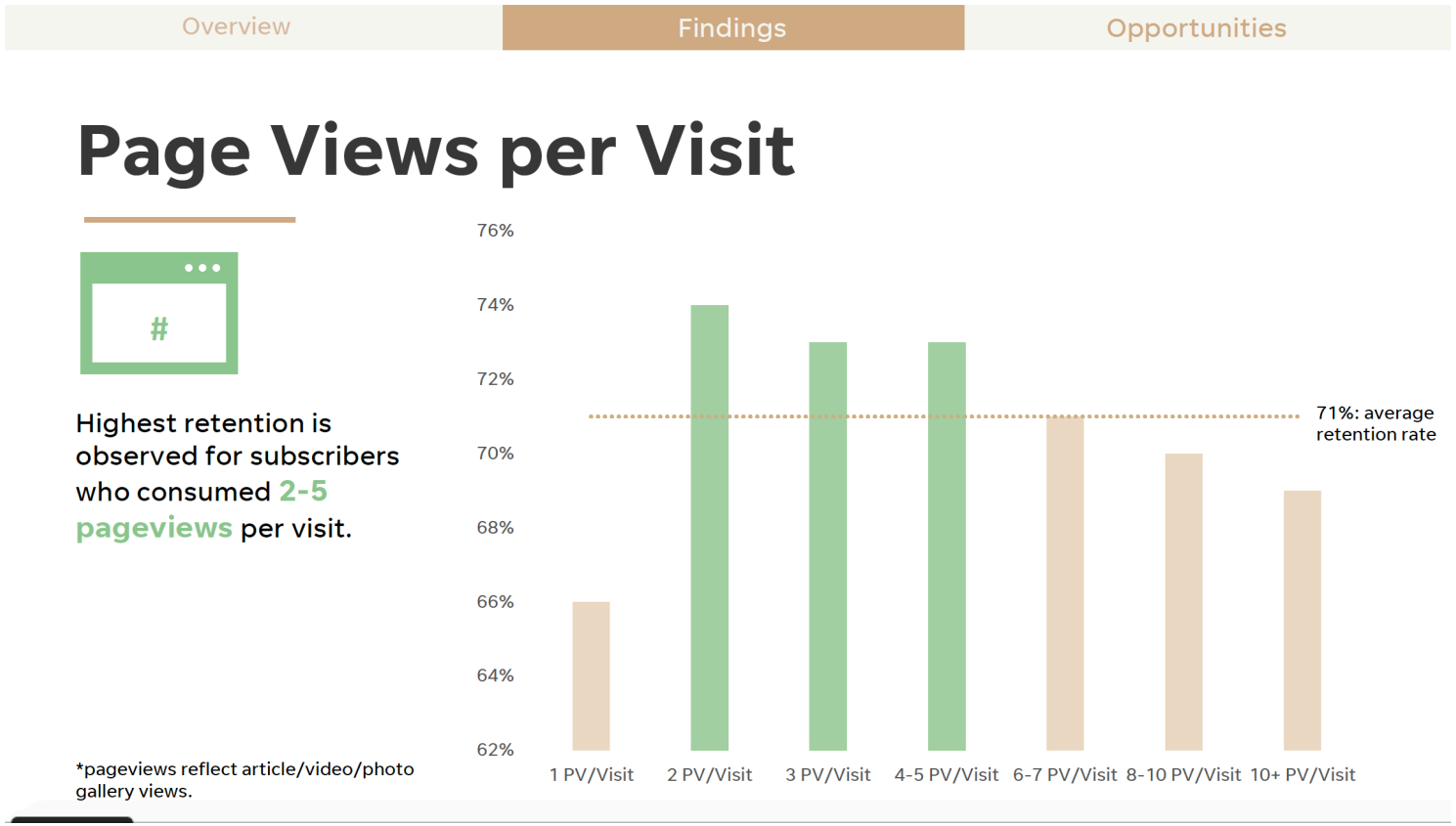
Tips!

Presenting in a PowerPoint vs Word Document

- Be clear and concise
- Short introduction, brief overview
- Pick 3-5 important points to guide your story
- Use graphics – grabs attention
- Use icons sparingly – don’t overwhelm
- Wrap up with conclusion and key takeaways (what audience will remember most)
- Have a clear storyline

- Most informative document
- All information and data points can be described here
- More comprehensive, wordy
- Less visuals, more information based

Using a Bar Chart



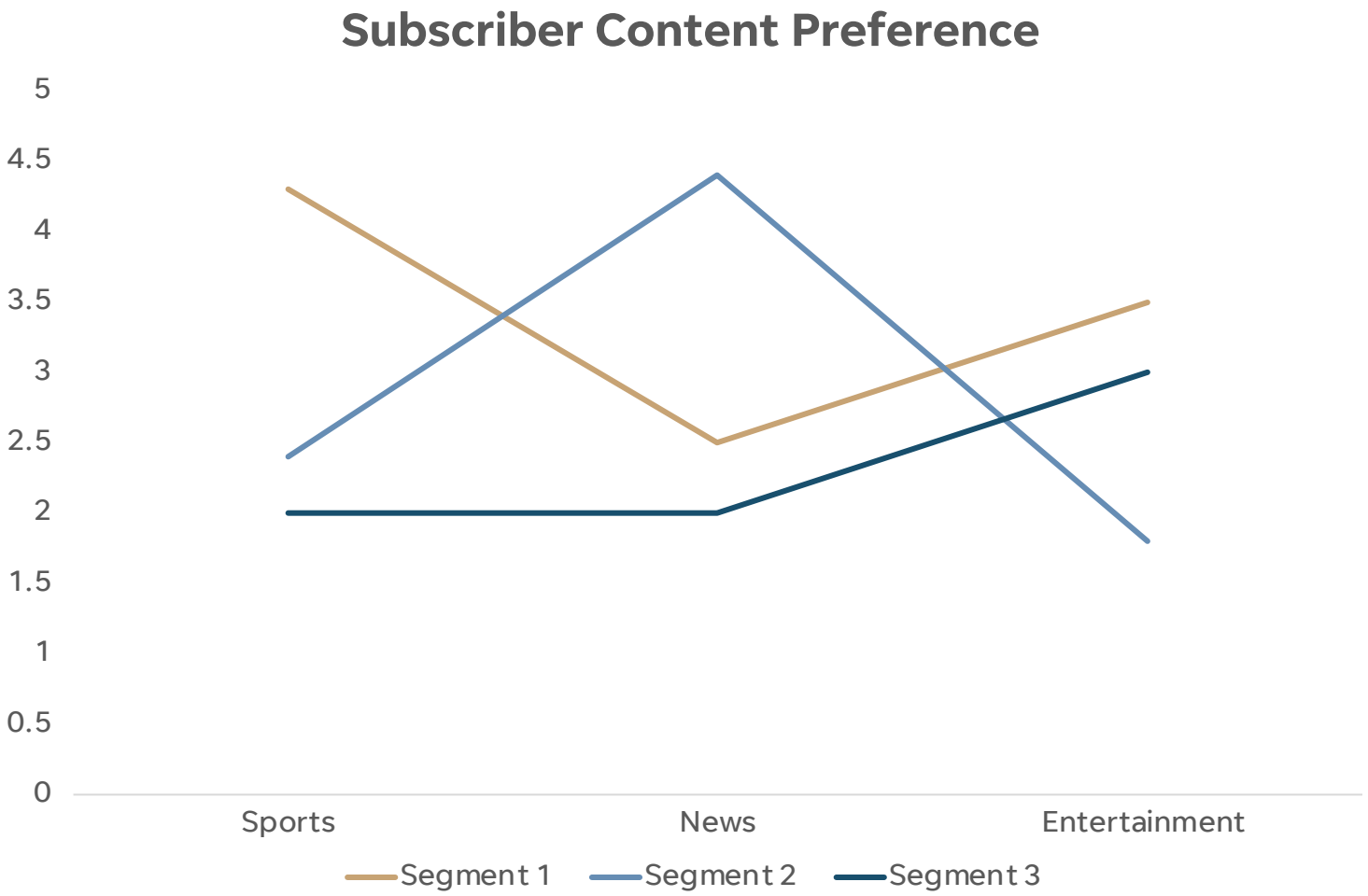
Find the important data
Use a pop of color to highlight important data points in a bar chart.

Match the axis font to slide font
This might seem silly, but it does make a difference visually.

Use icons to indicate what the bar chart is about
Gives audience a visual of what the topic is. Helps retention!

Used more to compare different data points

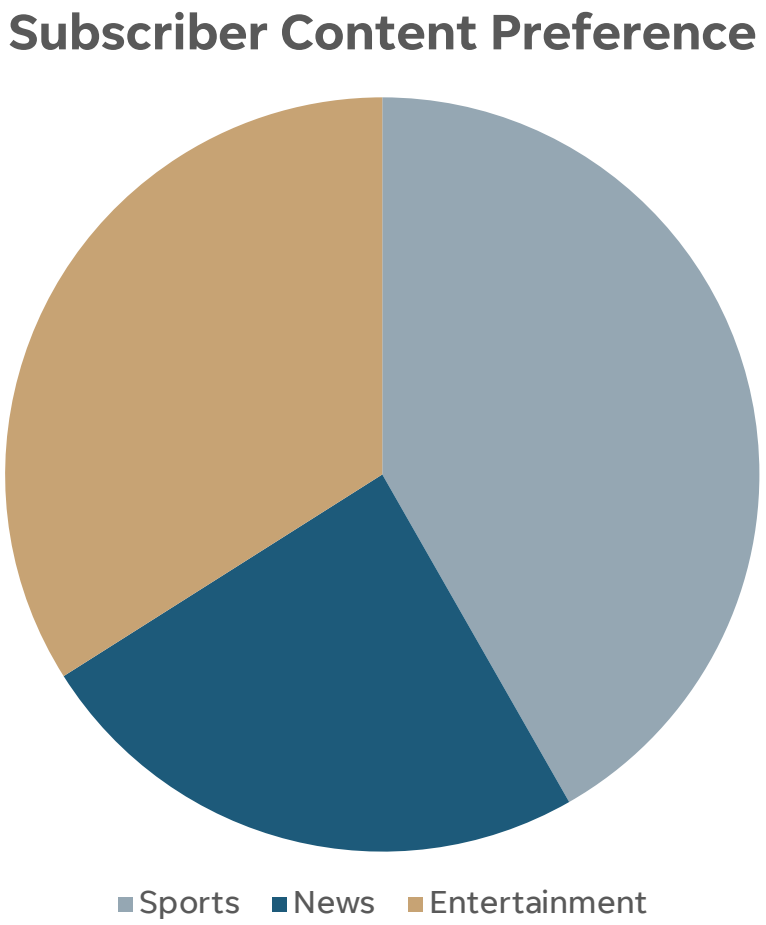
Using a Line Chart



Most visually engaging for comparing different groups.
Helps present an easy visual for where highest and lowest data points are, how groups compare to each other.

Tip - I usually adjust the graph on PPT accordingly:
Get rid of graph horizontal lines, **change all font to Unify Sans**, and **change line colors** to match your slideshow theme. This makes it less busy and easier to follow!

Using a Pie Chart



When using categorical data
Provides an easy visual, allows people to see the composition of something.

Pie chart segments:
Represent each category's contribution to display parts of a whole. If your data does not represent this, then you should choose another chart.

How many categories?
It’s best practice to never have any more than 7 categories as it becomes harder for the eye to distinguish relativity of size between each section.

DON’T USE WHEN..
There are similar sized categories, it can be difficult to interpret, so keep that in mind.

Icon Usage

Comprehensive use is important!
Try to use icons of the same style (aka our Icon Library), if pulling from random internet site, use sparingly.

Icons leave a deep impression on our audience
Images allow the audience to **imagine the meaning** without being bound by inanimate words.

HOWEVER, don't want to create imagery over kill.
With more than 5 icons on a slide, it defers from effectiveness and creates confusion.

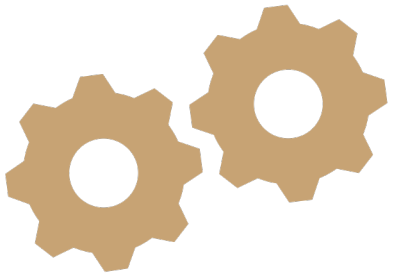
5 icons is usually enough, however, use more at your own discretion. The following slides use 7, which can work if organized on the slide effectively.
Think to yourself: does each icon have a purpose to them? If they're just being used for decorative purposes, take them off.

Example: Too Many Icons

1. **Category**
   More text here more text here more text here
2. **Category**
   More text here more text here more text here
3. **Category**
   More text here more text here more text here
4. **Category**
   More text here more text here more text here
5. **Category**
   More text here more text here more text here
6. **Category**
   More text here more text here more text here
7. **Category**
   More text here more text here more text here

Example: Efficient Use of Icons

**this includes the same number of icons as the last slide, it makes a huge different to present them clearly and separately from one another!



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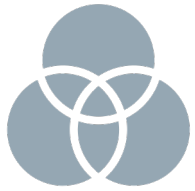

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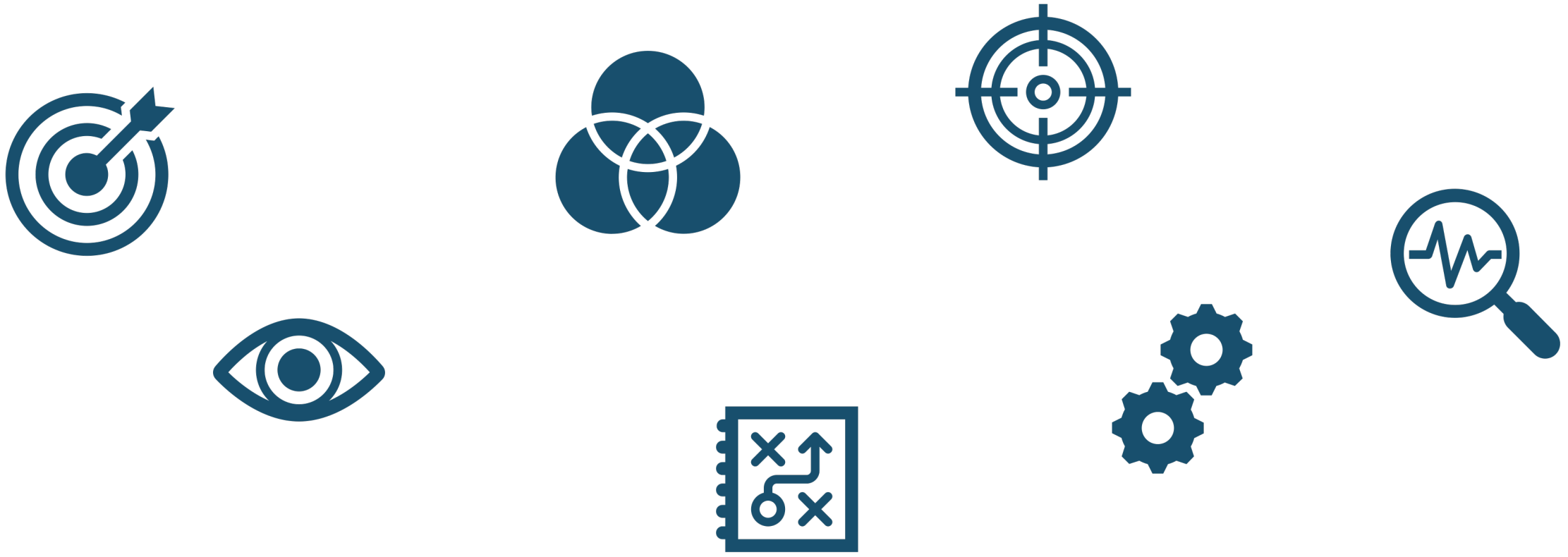
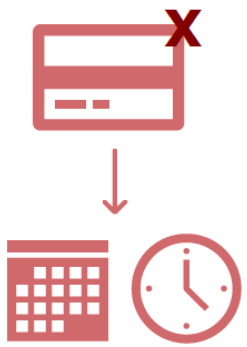
Animations



Accounts that enter Grace within the 1st 100 days are **24% less likely** to retain.



Accounts whose credit cards decline in the first 100 days are **22% less likely** to retain.

Sales source of Kiosk/Crew, Groupon and special events.

Comments and shares on articles.

Calls placed to customer service that are classified as “Other"= indicators for cancellation.

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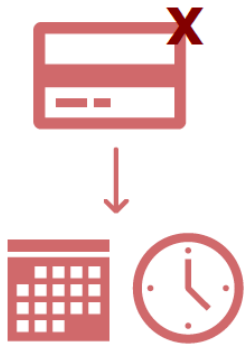

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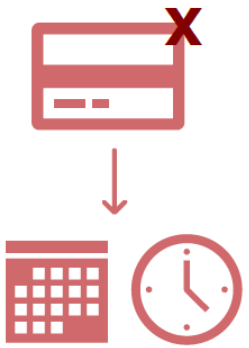

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GROUPON

Comments and shares on articles.

Calls placed to customer service that are classified as "Other"= indicators for cancellation.

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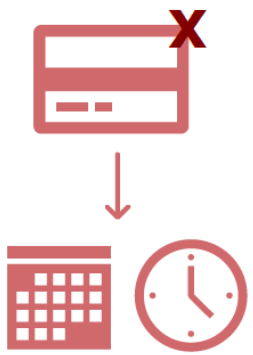

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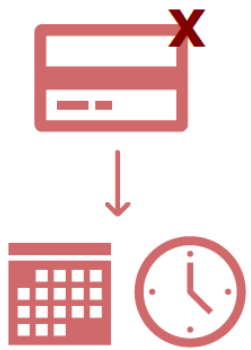

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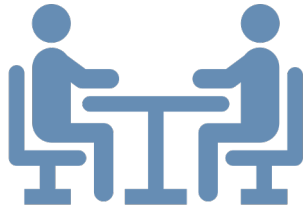
Understanding

Take a step back from the data and ask yourself, could you explain this to a high schooler and have them understand?



Practice on someone totally removed from this project. How can you make it simple and understandable enough for business-driven people to get it?

...THEN you have an effective story.

Jargon

What is it?

Unnecessarily complicated language used to impress, rather than to inform, your audience. Data science jargon will draw from the point instead of emphasizing it.

Evaluate your audience:

- Make sure your language is **as clear as possible.**
- Special terms can be useful within a particular audience (our data science team) and may be the clearest way to communicate with that group.
- However, going beyond necessary technical terms to write in jargon can **cause misunderstanding or alienation.**

Getting Back on Track

Scenario: **You're giving a presentation and someone asks you a question that completely throws you off track. How do you get back to your planned presentation?**

There will be questions that come up with data that might not be evident on a particular slide. This can sometimes distract you, taking you down a rabbit hole of thought that weren't originally planned. Some tips:

Have a list of phrases that help you get back on track.
Ex: That's a great question, I'll be addressing that on X slide.

If you do not know the answer, then say so and offer to find out. Then ensure that you follow up.

Have a break for Q&A
Sometimes, letting people ask questions at a planned point will stop them from interrupting when unplanned.

Moving Forward...

New Data Visualization tools

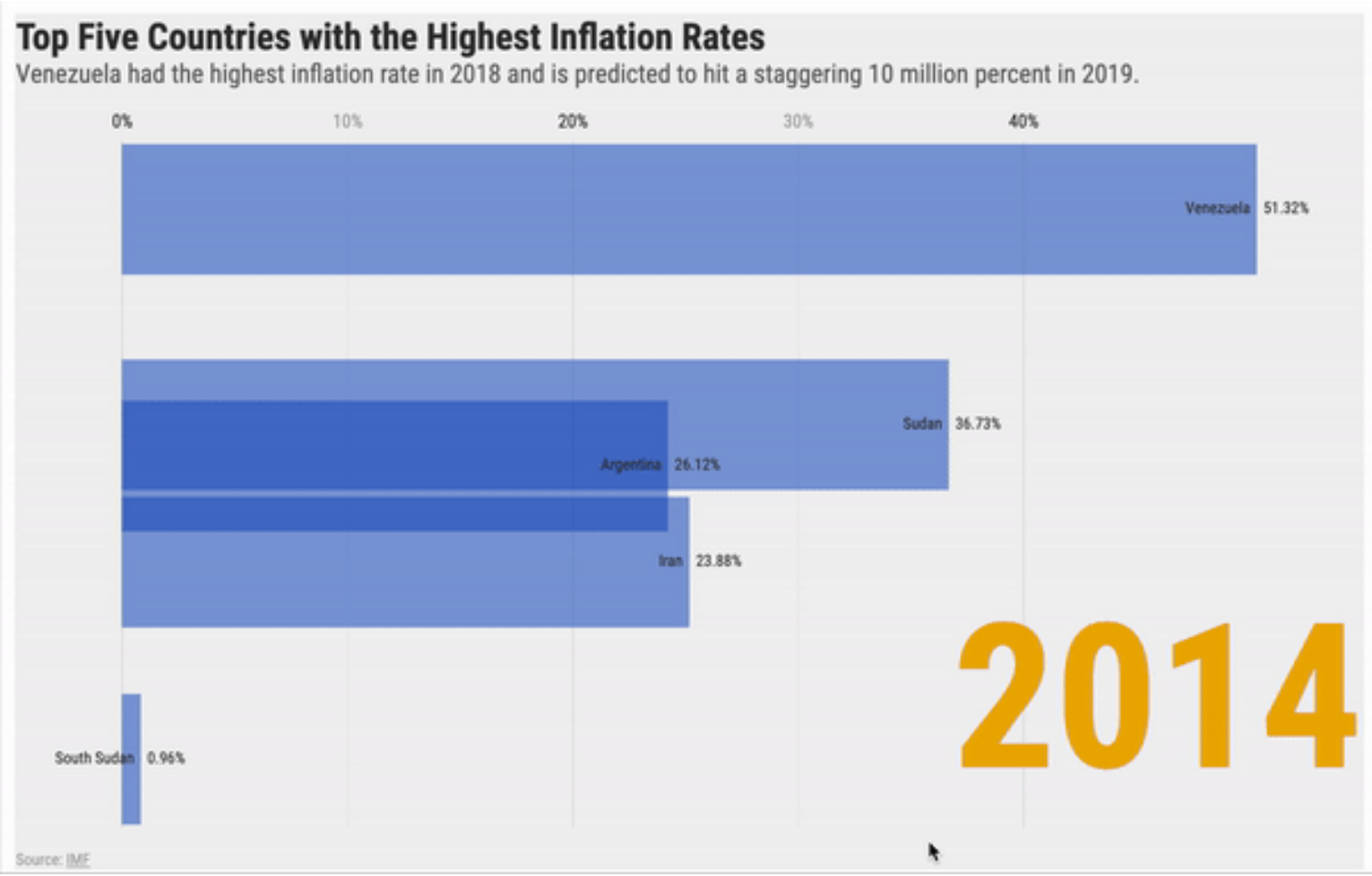
I've been doing a lot of research and tutorials in the past month on interesting data visualization tools we can use besides flat graphics (what we've been using). Some options:

Adobe After Effects
motion graphics,
animated icons basically

Flourish

Creates moving visualizations from excel spreadsheets. Very easy tool – effective with showing change over time, geography, survey data, before and after.

Flourish Example



A Flourish graphic made for our Uprooted project.

Inserted data from an excel spreadsheet, the program creates free graphics for you using data sheets!

Thank you.

Questions?