

Storytelling with Data

Module 11: Preparation for presentations

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Unanswered, or new, questions from discussion?

Agenda

Upcoming deliverables

Today's objectives

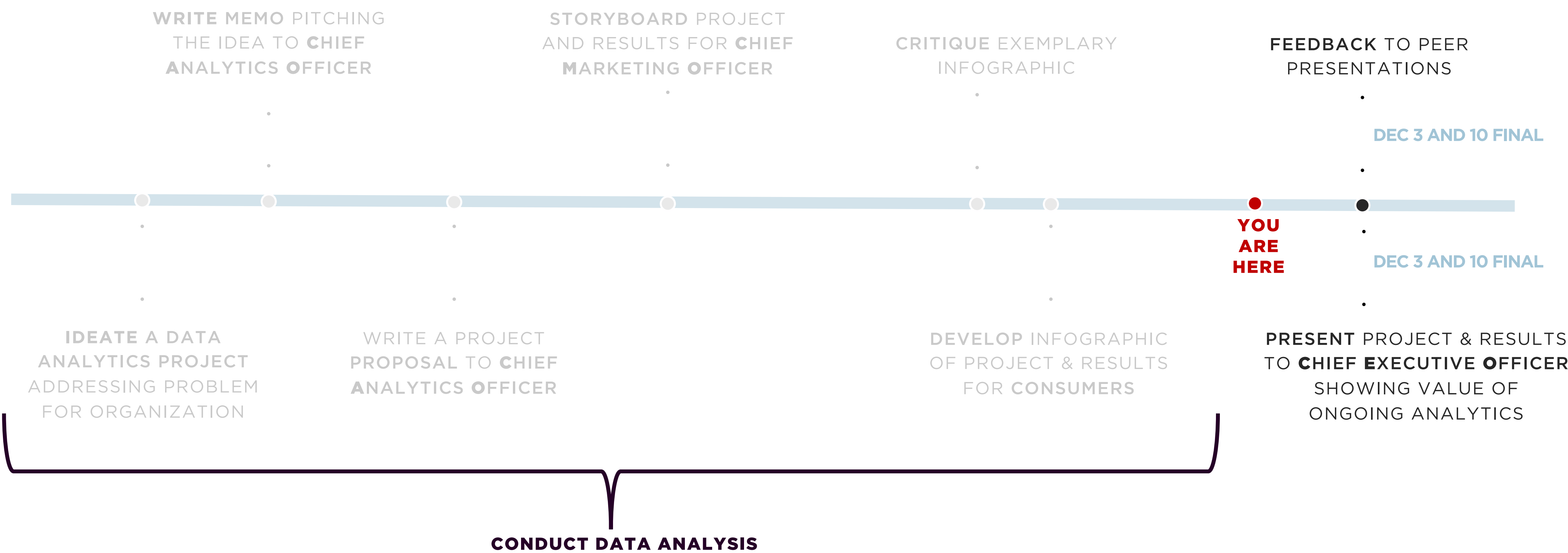
Communication with presentations

Upcoming deliverables

A faint, light blue illustration of a person with their arms outstretched, positioned in the background on the right side of the slide.

Upcoming deliverables

Persuasive presentation to CEO and Peer Feedback — tell the story of the analytical project that was pitched in the memo and proposal and communicated with consumers in the storyboard and infographic assignments to convince the CEO to invest further in analytics. Provide peer review.



Today's Objectives

Objectives

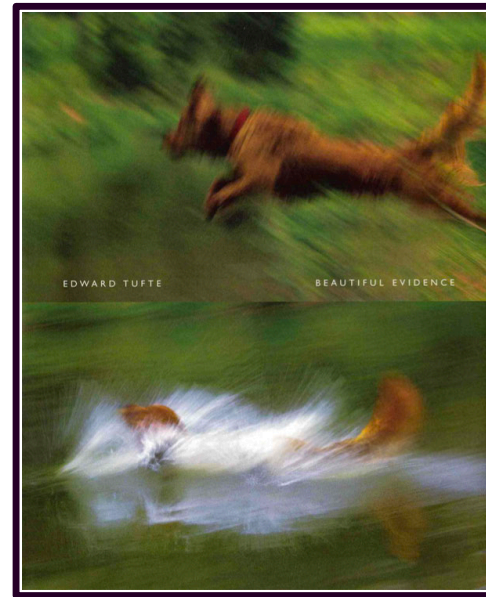
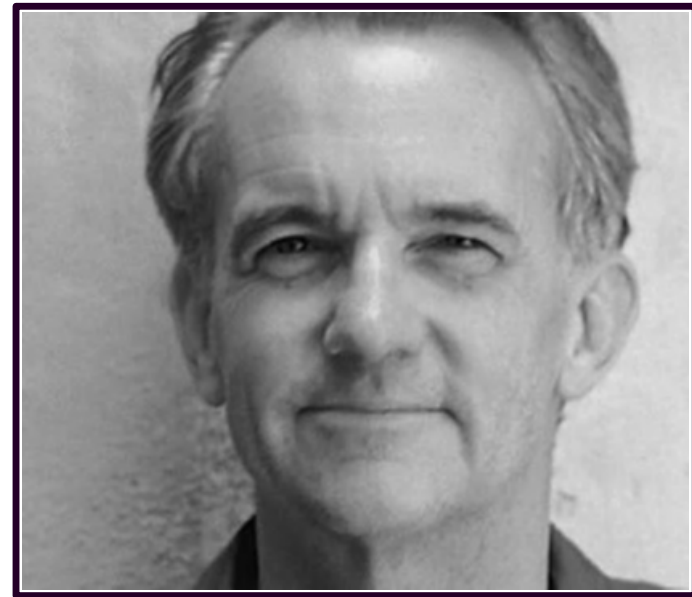
1

Considering constraints and limitations of presentations

2

Preparing to present an analytics project to an audience

Thoughts on presentations



The cognitive style of PowerPoint, in Beautiful Evidence

Tufte

Hailed "The Leonardo da Vinci of data" by the New York Times. He is professor emeritus of Political Science, Statistics, and Computer Science at Yale University.

His claim

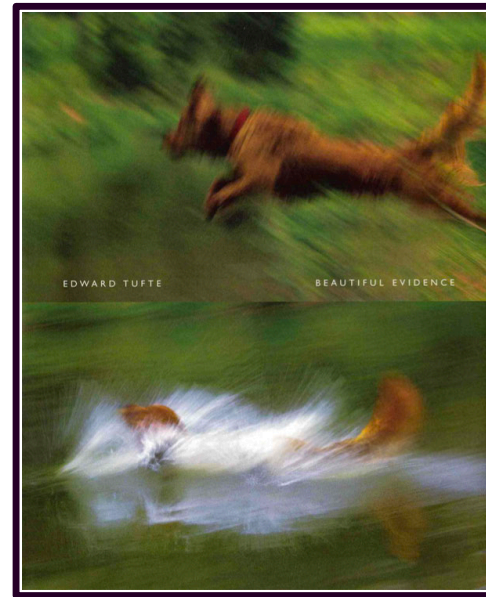
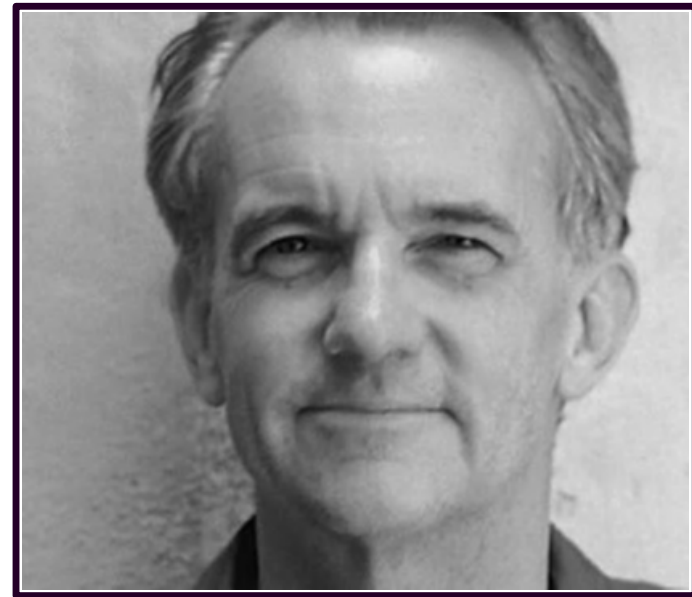
PowerPoint, compared to other common presentation tools, **reduces the analytical quality** of serious presentations of evidence.

This is especially the case for the PowerPoint ready-made templates, which **corrupt statistical reasoning, and often weaken verbal and spatial thinking.**

Is he recommending we avoid presentation slides?



Microsoft Machine Learning & Data Science Summit



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Poor defaults

There are better tools for doing business analysis than reading aloud from bullet lists.

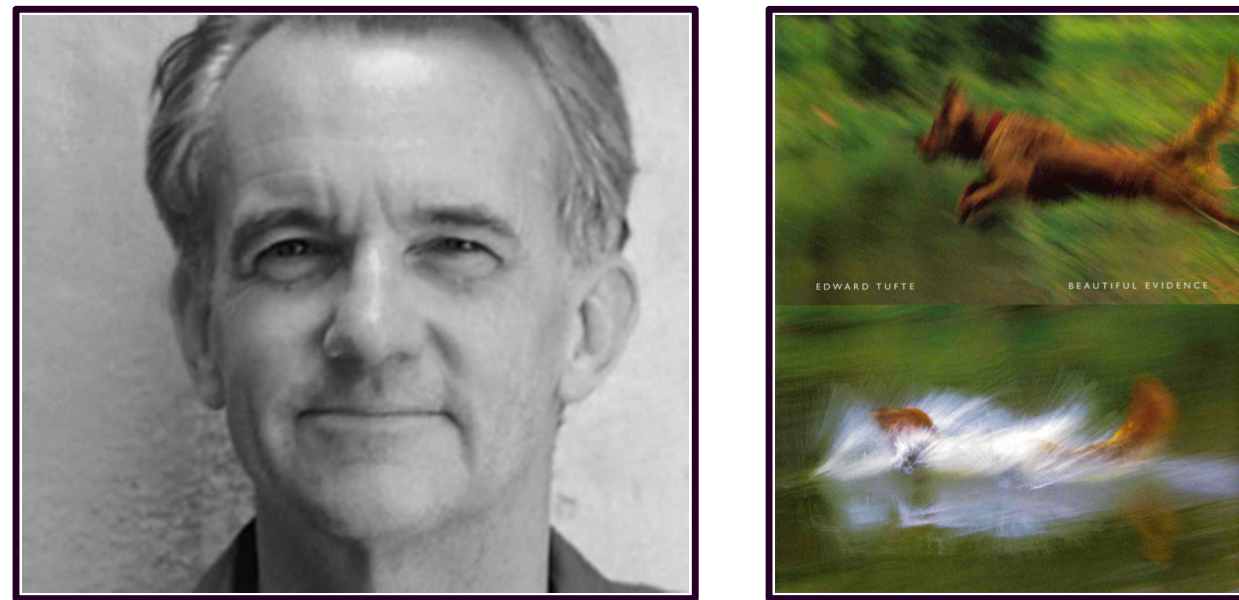
Low resolution forces sequenced, not spatial, review

Slides are very **low resolution** compared to paper, most computer screens, and the immense visual capacities of the human eye-brain system.

With little information per slide, many slides are needed. **Information stacked in time makes it difficult to understand context and evaluate relationships.**

Show comparisons adjacent in space

Visual reasoning usually works more effectively when the **relevant evidence is shown adjacent in space** within our eye span. This is **especially true for statistical data, where the fundamental analytical task is to make comparisons.**



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Use the right tool for the information

Many true statements are too long to fit on a slide, but this does not mean we should abbreviate the truth to make the words fit. It means we should find a better tool to make presentations.

Increase data-ink on slides too, within reason

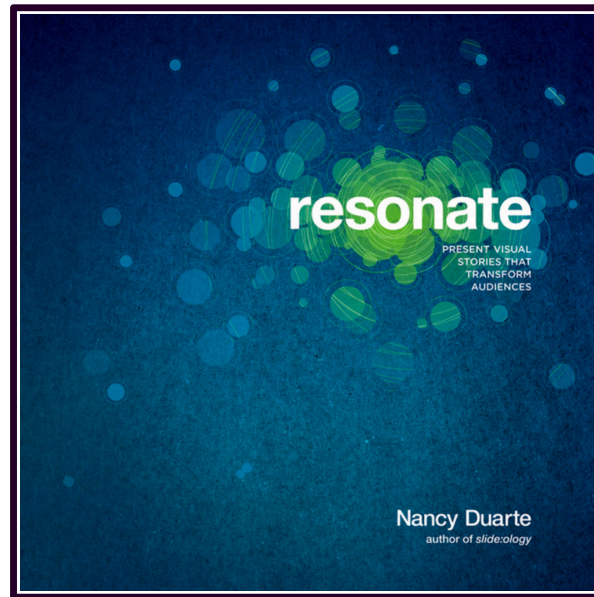
While PowerPoint is a competent slide manager, too often the images are content-free clip art, the statistical graphics don't show data, and the text is grossly impoverished.

Alternate approaches

Consider distributing a well-prepared technical report before the meeting, and "following the reading period, the presenter might provide a guided analysis of the briefing paper and then encourage and perhaps lead a discussion of the material at hand."

Preparing for presentations

A faint, light blue background illustration of a person in a meditative pose, possibly a deity or a sage, wearing a crown and having arms outstretched. The figure is centered in the background, behind the main title.



There's always room to improve, in Resonate

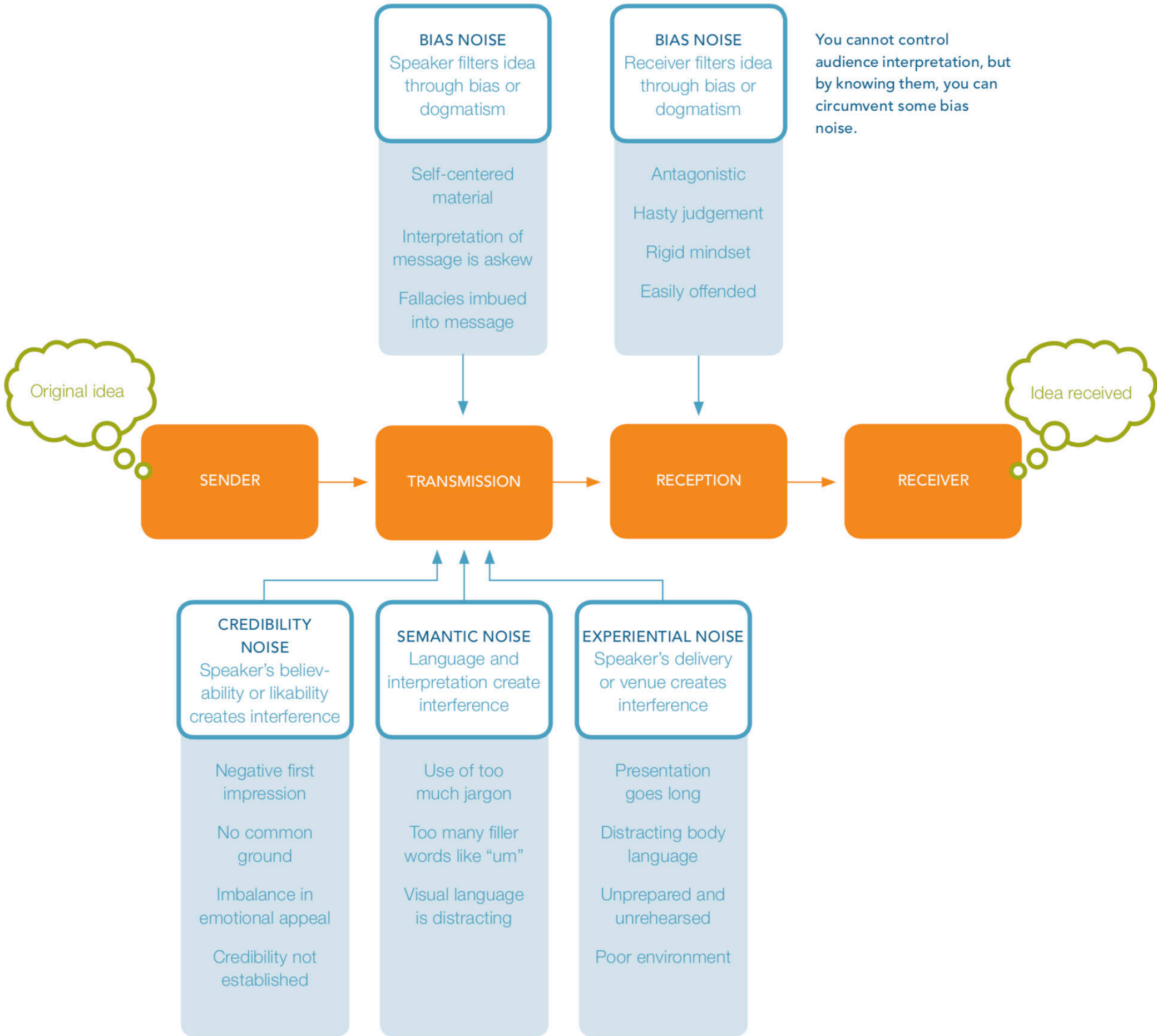
Duarte

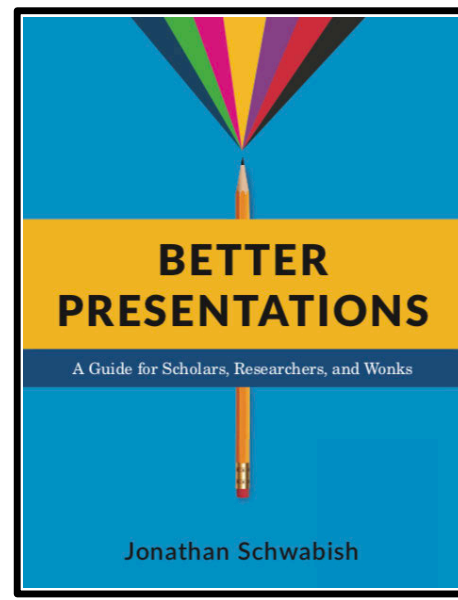
Duarte is known for her work with Vice President Al Gore on the award-winning documentary slide show known as An Inconvenient Truth.

Focus the message

Remember Doumont's second law of communication?

Maximize signal, minimize noise:





Better Presentations: A Guide for Scholars, Researchers, and Wonks

Schwabish

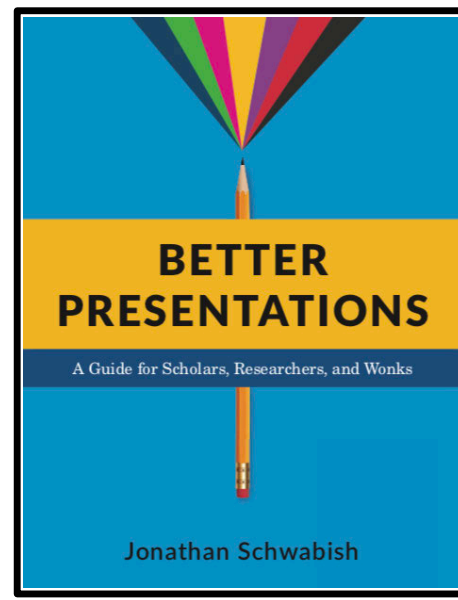
He is a senior research associate at the Urban Institute's Income and Benefits Policy Center. He is also a member of the Institute's communication team, specializing in data visualization and presentation design. He has published widely in various journals.

Concepts

Designing your presentation

Building your presentation

Giving your presentation



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Starting questions

What type of presentation are you giving?

Who is your audience?

What is the headline message?

What do you want your audience to do with your conclusions?

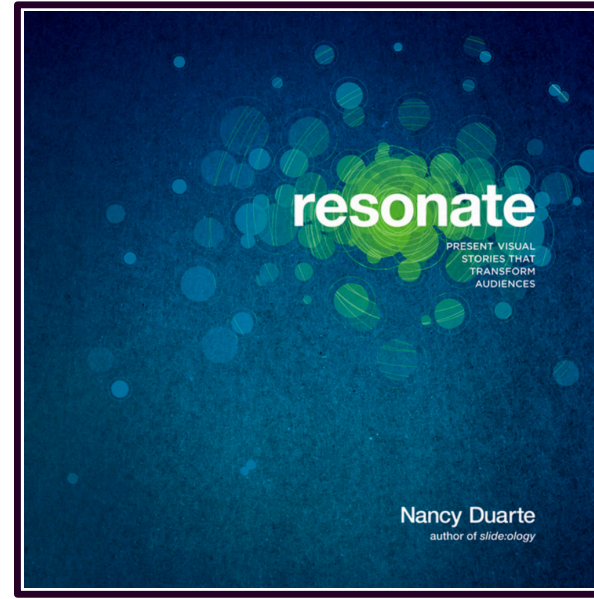
What is your opening statement? Focus on conclusions

What is your closing statement? Get your audience to embrace and act on your message

What are the sections of your presentation?

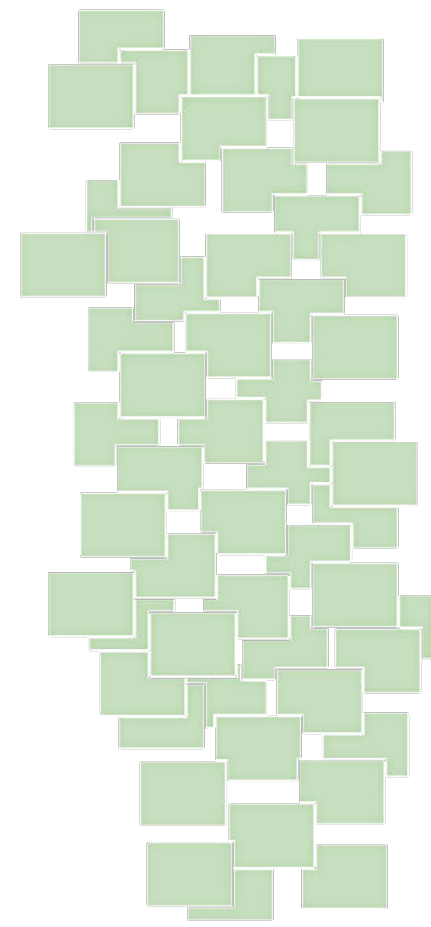
What stories can you tell?

What graphs and images can you use?



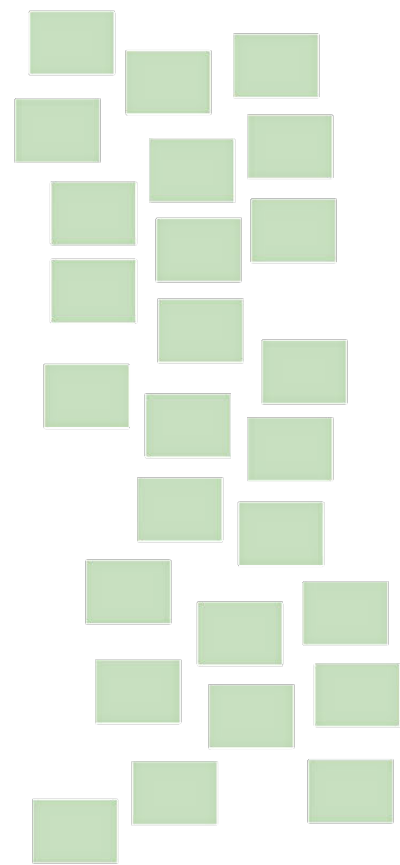
No single method or process works for all. Use whatever tools enable you to rearrange easily, add, and ~~remove~~ story components ...

GENERATE IDEAS



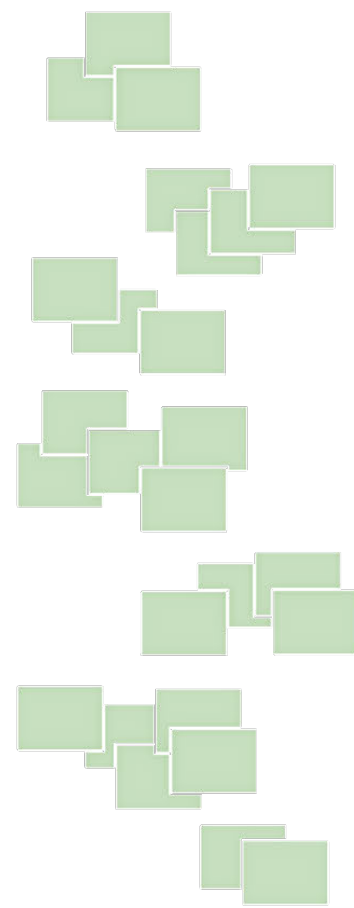
Collect, create, and record as many ideas as possible.

FILTER DOWN



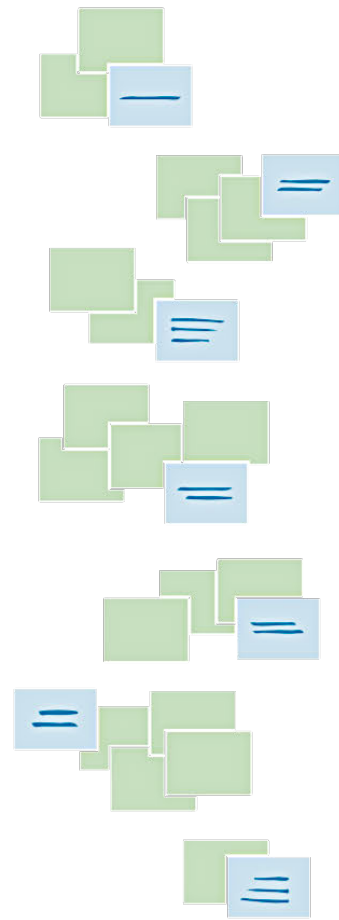
Filter down to the best ideas that support your big idea.

CLUSTER



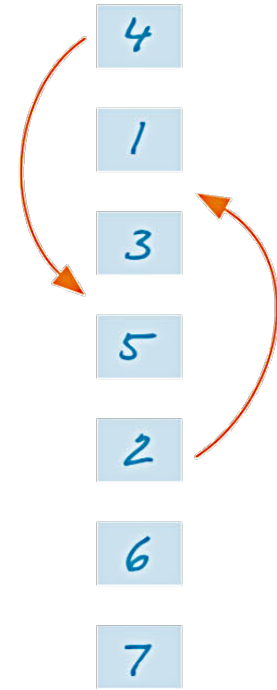
Cluster ideas by topic.

CREATE MESSAGES



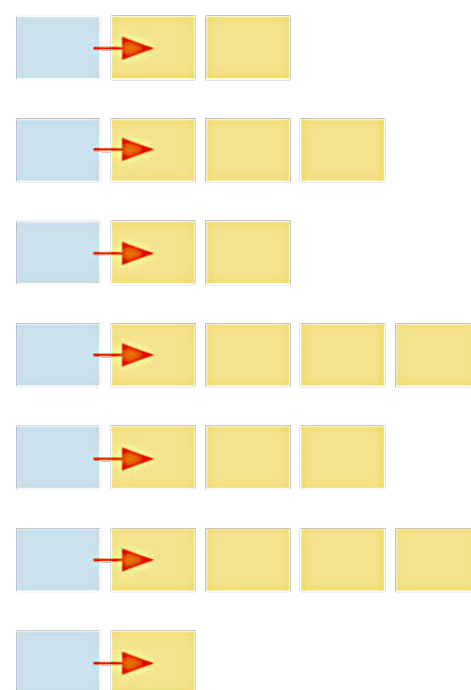
Turn topics into charged messages in the form of a sentence.

ARRANGE MESSAGES



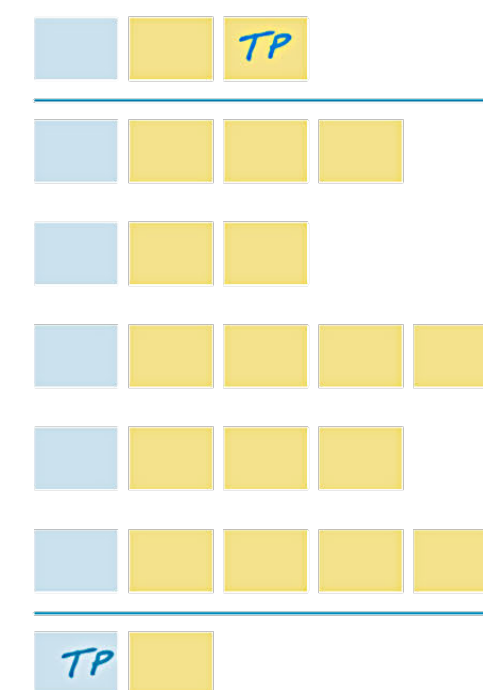
Place messages in an order that creates the most impact.

ADD SUPPORTING POINTS



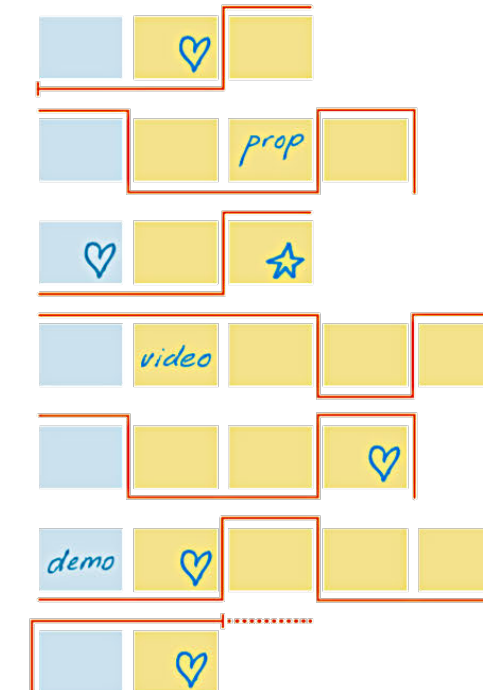
Each message needs supporting evidence in the form of slides.

STRENGTHEN THE TURNING POINTS (TP)



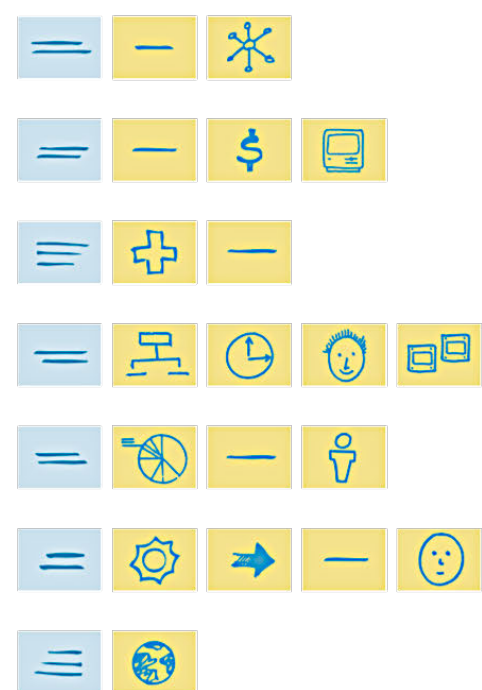
Get your acts together! Ensure you have a clear beginning, middle, and end with strong turning points.

VERIFY CONTRAST

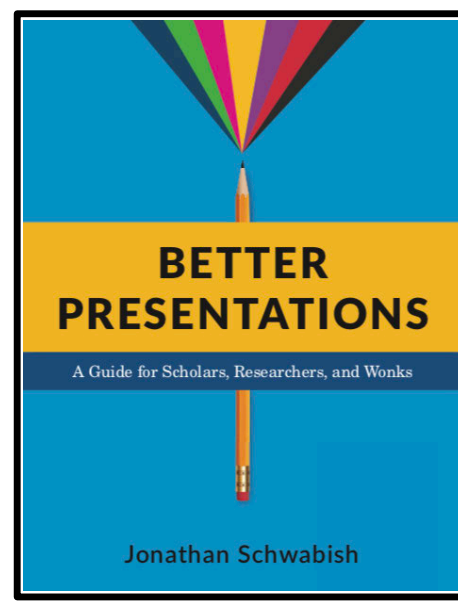


Validate the content contour, emotional contrast, and delivery contrast.

VISUALIZE MESSAGE



Once the message and the structure are final, turn the words into pictures.



Better Presentations: A Guide for Scholars, Researchers, and Wonks

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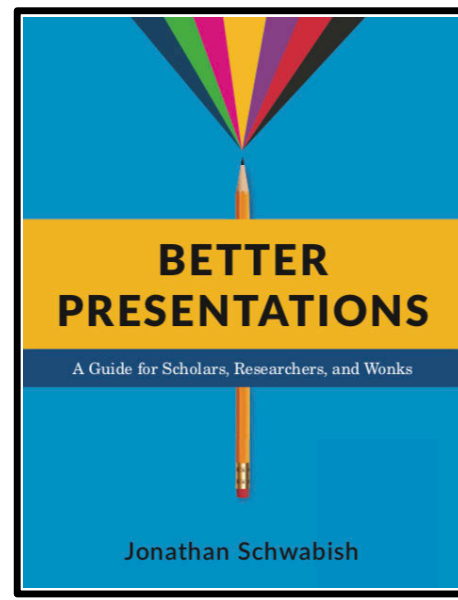
Purpose of design:
unify elements,
focus attention

Employing good design techniques is about unifying the various elements on the screen and focusing your audience's attention on your important points so that they can decide whether or not to buy into your ideas.

Use **color** and type
to unify and focus

Use **color** just as we've discussed—purposefully—for **linking** together text and graphics.

Size of minimum **type** for main content (c.f., footnotes, etc.) for readability from the back of the presentation room. Choose differences in size to reflect hierarchy of information. Use **white space** to organize and focus ideas.



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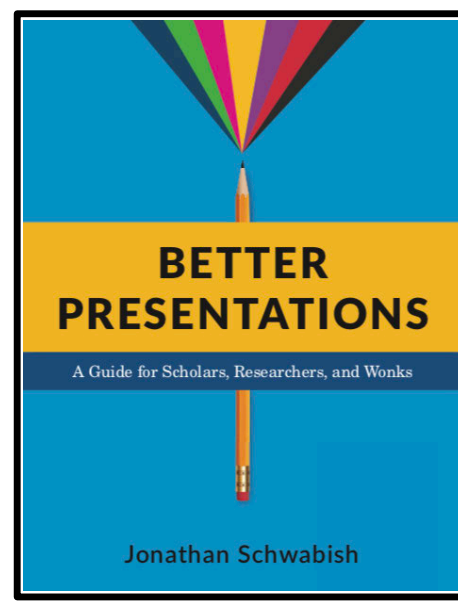
Giving your presentation

**Comprehension of
text depends on
amount and clarity**

The difficulty for an audience to get the intended message depends on both amount of text and clarity of the words, phrases, and sentences chosen.

**Best practices in
graphs hold true in
presentations, too**

Consider what **specific message** you want your graph to show. This will let you **choose each attribute** (gridline, tick mark, data marker, data label, color, and other objects) to help the audience understand your message.



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With text and
graphics, use
layering to keep
context and **focus**

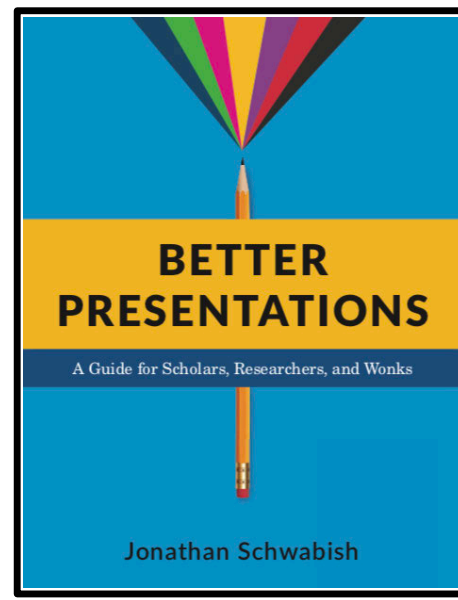
The idea of layering is to use a progression of slides, each time keeping the previous information while defocusing it, and **layering in new context using color, type, and gestalt principles to shift focus.**

Images should
support your
message

Any images used should support your content and not be included merely for decorative purposes.

**Consider full-bleed
and background**

With images in support of your message, such as to create emotion or context or example, consider making them full-bleed in the background, and adjust their crop or color to avoid interfering with main messages.



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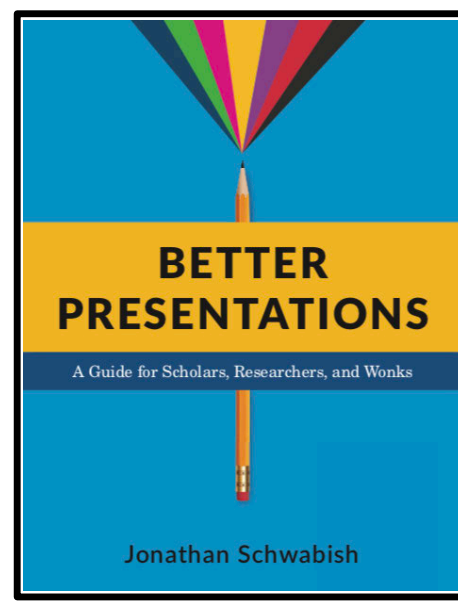
Giving your presentation

Slides as guides and transitions:

Title
Agenda
Header
Breaker
Ending

The purpose of scaffolding slides is to **guide and focus** your audience's attention as you **transition from one section to another**, and to drive home important points.

They act as scaffolding because they ... **support the delivery of your messages**.



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**Preparing means
practicing,**

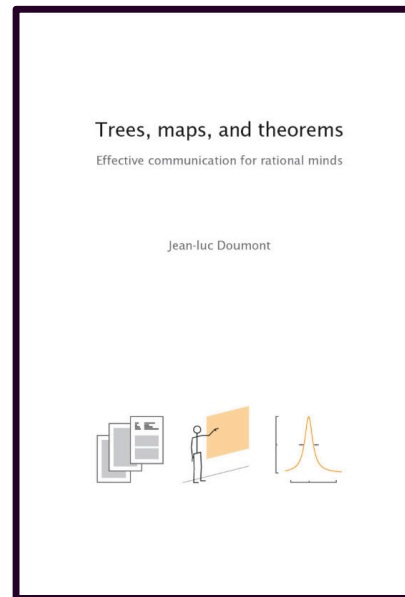
and

**practicing means
speaking aloud**

Practicing—or perhaps, better put, rehearsing—involves standing up, holding your presentation clicker, and speaking aloud.

It is not sitting at your desk and silently thinking about what you plan to say for each slide.

Speaking also allows you clarify your messages. Use your practice to adjust what reads awkward and remove or revise what doesn't make sense.



Effective oral presentations, in Trees, maps, and theorems

Doumont

An engineer from the Louvain School of Engineering and PhD in applied physics from Stanford University, Jean-luc Doumont wrote this book to help engineers, scientists, and managers with business communication.

First, develop interest and need

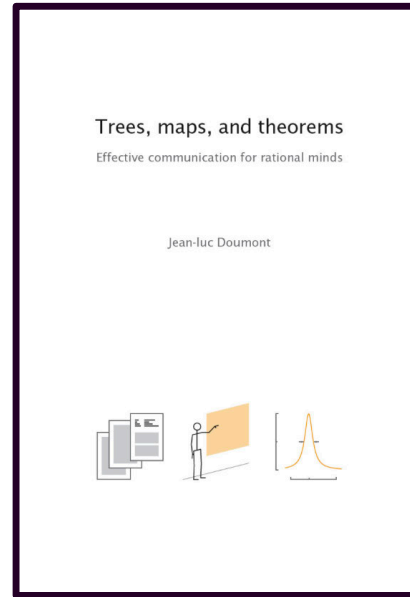
Attention getter — strives to draw everyone's attention to the topic as rapidly as possible by **relating the topic to audience concerns**.

Need — motivates the audience by telling (or by reminding) them **why something had to be done**; closes in on a specific problem.

Task — identifies “who did what” in an effort to address the need; **situates the speaker with respect to the audience and to the topic**.

Main message — **states the main conclusion upfront**; also known as *thesis* or *take-home message*.

Preview — **announces the body's content**, suggesting how it helps support or develop the message just stated; also known as *outline*.



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**Reveal your
structure upfront,
after getting interest**

A presentation must do more than simply be well structured: it must make the structure and the underlying logic of this structure readily apparent to the audience.

**Slides are for
conveying messages,
generally need text**

Visual codings being in essence ambiguous, effective slides almost always include some text: **the message itself, stated as a short but complete sentence.** Besides the text statement, this message should be developed as visually as possible: this development should include only whatever words are necessary for the slide to stand on its own.

Let's look ahead

For Next Class, Module 12:

Agenda next week

Presentations **AND** peer review

The minimum

Wacharamanotham, Chat et al. “Special Interest Group on Transparent Statistics Guidelines..” CHI Extended Abstracts (2018): n. pag. Print and web. <http://transparentstatistics.org>

Catch up on any readings you missed, or go back and review them for better understanding.

As Einstein said, “any fool can know, the point is to understand.”

For online discussion

Next steps?

Did you enjoy choosing your own project?
How might you plan to deepen the analysis in a way you'd like to showcase in your portfolio?

Letter to your future colleagues?

Having had the experience of taking this course, what advice do you have for your future colleagues about to begin this course?
In other words, what would you want your younger self to know to be most successful?

See you
after the holiday!

