



Ta Dah!

An Insider's Insight into Creating Better Slide Presentations

At some point you will have undergone 'death by PowerPoint'. Such experiences have given presentations a bad rap. And yet, they can be a powerful means of communication. So what differentiates a good presentation from a poor one? Personality, content and design. Although we can't all be as charismatic as movie stars or make our work critical to world peace, we can determine the content and design of our slides.

Use the right slide design and the whole presentation comes to life. Your audience is more likely to hang on your words and focus on your message. Follow some simple rules and you will create well-designed presentation slides that effectively communicate your message, engage your audience and get you noticed. We offer some insights from our medical writing and design teams who have been developing professional presentations since 1998.

Before you start

Plan your talk before opening MS PowerPoint (or Keynote). Have a clear grasp of your main message, presentation structure and data to be presented. Rationalise how many slides you need to achieve your communication goals within your allotted time (a reasonable estimate is 2 minutes for each slide).

Plan each slide by noting the one idea you want the audience to take away from the slide in a single sentence, logging possible visuals that you could use to support and explain your point.

Structure your presentation like a story with a clear beginning, middle and end. Layer your slides over the top of your presentation, viewing them as an accessory that enhances the audience's experience.

Prepare to succeed

Remember that it is you, the speaker, that makes a presentation valuable. Slides should not be the ultimate source of content and data – the speaker should provide the majority of the information, understanding and insight.

Plan to balance the flow of information to reduce the likelihood of overload on any single comms channel. Describe any images you display rather than covering your pictures in descriptive text. Mentally integrating an image and spoken narrative takes much less effort to process than that for an image covered with text.

Avoid any temptation to read from your slides by minimising textual content. An audience that is reading isn't listening. Highlight important aspects and leave the rest to speech.

Key Insights

When preparing a slide deck you need to view it as a multi-dimensional project, where each dimension must work in harmony to the benefit of the whole presentation. We can't help you with the subject matter or make you a better presenter but we can make sure that your slides are first-class and best serve your presentation. There are six disciplines to master when you want to design excellent slides: text, typography, bullets, colour, images and themes. Below we provide suggestions on how you should use each of these to create a killer presentation (and how to avoid some of the more obvious mistakes).

Text

Be brief and clear. Use keywords and punchy phrases rather than long sentences. Be certain that your text scans and can be understood.

Use Spellcheck! Spelling mistakes can be embarrassing. This is a good reason to initially plan/write your presentation on a word processor – away from other distractions.

Your audience will struggle to simultaneously read text on the

screen and concentrate on what you are saying – in the end they may resort

to reading the screen instead of listening. If you must have more than 10 words on a slide try to progressively reveal text as you need it – this stops the audience from reading ahead of you.

The best slides often have no words at all – making them virtually meaningless without your narration. Remember, the slides are meant to support not direct the speaker. You might want to review some of the presentations given by Steve Jobs or one of the many TED Talks on YouTube for examples of how this can result in a top-notch presentation.

USE PHRASES
RATHER THAN
SENTENCES



DO NOT PUT
EVERY WORD YOU
INTEND TO SAY ON
YOUR SLIDES



Bulleted Lists

Bullets are a great tool for underlining important points in an easily accessible and digestible manner. It is a particularly useful way of providing the audience with numbers that they might otherwise find hard to process. Use bullets wisely and they will serve you well. To make sure that that your bullets achieve this goal:

- Ask yourself – do I need to use a bulleted list?
- Keep your points to the point (3 words = powerful; 4 words = good; 5 words = OK; 7 words = wordy; 9 words = too long)
- Don't bombard your audience with too many bullets (3 bullets = good; 4 bullets = excellent; 5 bullets = heavy; >6 bullets = boring)
- A single point does not require a bullet (a list of one isn't really a list)!

Typography

Small, unreadable text compromises your message and frustrates your audience. Make sure that your slides can be read from the back of the room. If you need to use fonts that are less than 24 points, there are too many words on your slide – create a second slide or shorten your text. Presentations are for humans not eagles!

Fonts communicate subtle messages to the audience – choose them carefully. Fonts such as Times New Roman or Garamond are known as serif fonts. Serif fonts have extensions or 'feet' (called serifs) that extend beyond the main body of the letter. Serifs are useful in printed documents but can produce a blurred look on screen (particularly on low-resolution projectors). Sans serif fonts (fonts without serifs), such as Arial or Calibri, produce a cleaner, less cluttered and easier to read effect 'on screen'.

Use the same font throughout your presentation. Black belts in slide design would suggest avoiding the ubiquitous Helvetica or Arial. However, obscure fonts can be troublesome – if they are not installed on the computer you are using to present on it will use a substitute font that may change markedly the look (and quality) of your presentation.

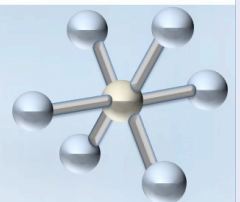
You can direct your audience to important points or content using differences in text size, bolding, italics or colour. In contrast, you will find that underlining is a poor way of directing attention. Avoid any temptation to use 'Text Effects' or 'WordArt' as it can make your presentation feel unprofessional. Maintain contrast between text and background.

Front Slide

An engaging front slide can really make your deck stand out. Think of your slide deck title like a newspaper headline that you can bring to life with a unique, memorable visual.

Remember, this slide is likely to be what the audience are staring at and thinking about while they wait for your presentation to begin. Draw them in but try to be honest.

Credentials and Capabilities



niche science & technology

USE CONTRASTING
TEXT COLOURS TO
DRAW ATTENTION



Which point are your
eyes drawn to?

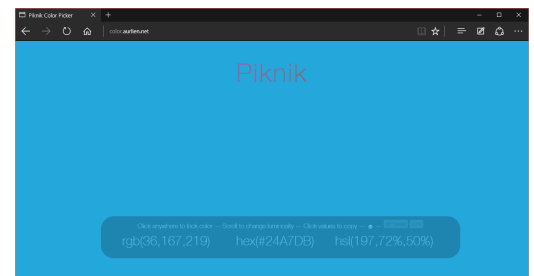
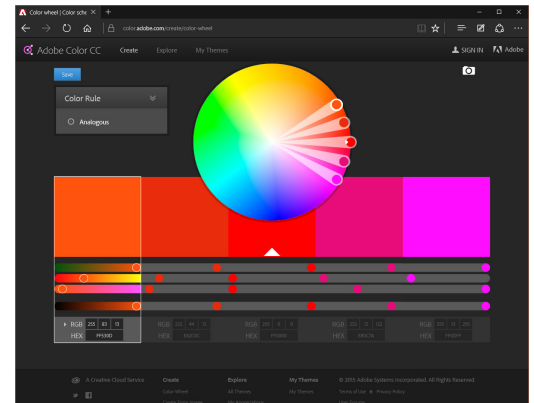
Colour

Colour evokes feelings, colour is emotional. The right blend of colours can help persuade, motivate and engage your audience.

Studies show that your use of colour can increase interest, improve learning and comprehension and augment the retention of information. Clearly, colour is a powerful tool. A strong palette of solid colours can have an impact equal to that of a jazzy custom-made background or fancy photo. Stick to a simple colour palette of no more than five colours.

Colours can be divided into two general categories: cool (such as blue and green) and warm (such as orange and red). Cool colours work best for backgrounds and warm colours for objects in the foreground but these rules won't guarantee the right combination of colours to woo your audience.

The key is to adopt a cautious approach. If you want to be creative but are not an expert in colour theory then you can use online tools to provide you with awesome colour schemes that work. Try the free online Kuler colour wheel (color.adobe.com), the simple yet gorgeous Piknik colour picker tool (color.aurlen.net) or the beautifully complex Oto255 (Oto255.com) to help with inspiration.



Themes, templates and slide design

To maintain audience engagement you need a consistent visual theme throughout your presentation. PowerPoint (and Keynote) provides various templates but designers often advise against using them. Many of the provided templates contain distracting elements such as borders or shading that can detract from your message. In addition, your audience will most likely have seen the stock templates many times previously (making them feel somewhat dated). Avoid design clichés that may make your presentation feel formulaic or pre-packaged.

You can design your own template in PowerPoint but this isn't essential as long as you define a set of 'rules' to follow. These would include:

- Colour palette (of not more than five colours)
- Font sizes and colours for titles, headings and text
- Rules for use of ancillary objects such as slide numbers, images, logos, footers, etc.

DON'T USE HEADINGS
OR TITLES UNLESS
THEY COMMUNICATE
THE MAIN MESSAGE
OF THE SLIDE



BE GENEROUS WITH
EMPTY SPACE

Images

People learn better when verbal or textual narrative is combined with visuals. This is because the mechanism that the brain uses to process visual information is separate from that used to process words. Visual information is processed thousands of times faster than verbal and when both are combined it results in a higher level of understanding and better data retention [1]. In fact, communication is actually inhibited when the same words are spoken and displayed on the screen simultaneously because people cannot process auditory and textual data at the same time [2].

Images evoke emotions so use them to grab and hold your audience's attention and communicate your key concepts. Compelling visual content can amplify your message and set you apart from other presenters. However, take care:

- Use only high quality graphics – poor on-screen resolution can appear amateurish
- ClipArt and cartoons can feel unprofessional if not used appropriately (and sparingly)
- Multiple images on one slide run the risk of stimulating multiple and confusing emotions
- Simply stretching images to fit your layout can markedly degrade the on-screen quality and changing the aspect ratio can impact on how an audience receives an image
- If an image is of secondary importance, making it slightly transparent will reduce the chance of it detracting from your message.



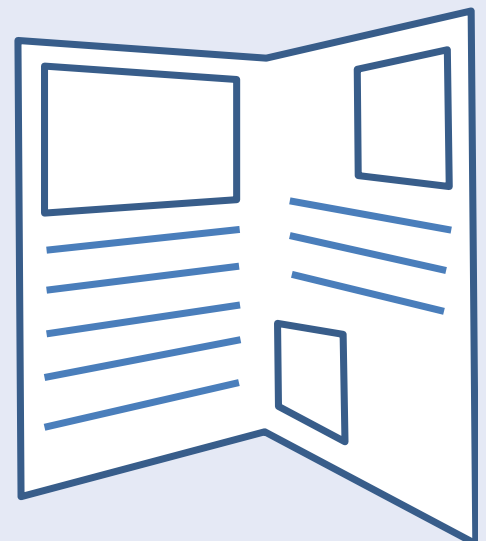
Try to use the entire screen for your images adding little or no text. Often images of people help the audience to connect with a slide on a more emotional level. Make sure that you place the image so that the eyes of your photo's subject are about a third of the way down the slide.

You can use your own high-quality photographs, purchase professional stock photographs or source images from one of the free on-line websites (e.g. XCHING) – just be cautious of potential copyright issues.

Using notes

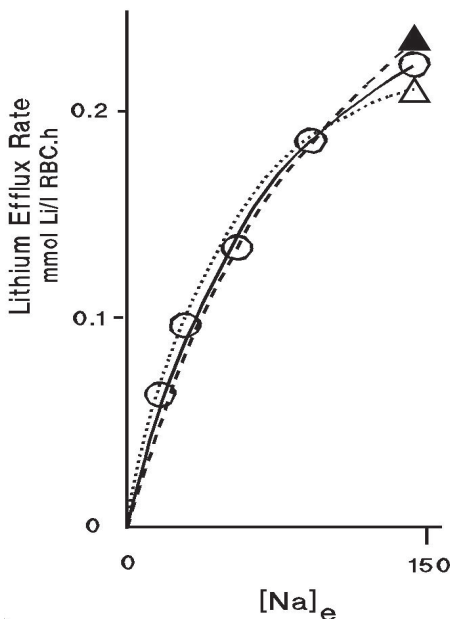
Many presenters try to make their slides function as both a presentation and a set of 'notes'. However, slides should be designed to visually augment your presentation. People often ask for your slides at the end of a presentation – if they were good slides they should be of little use without a full transcript or cheat notes.

If your presentation needs to stand on its own (e.g., as part of a training course) then use the 'notes' section to provide your narrative. Alternatively, you can prepare a document that details your key messages, describes your rationale and expands on your content. Your audience will be better served by receiving a carefully written document than by seeing cluttered, text-heavy and ugly slides. Just remember to distribute the notes AFTER giving your presentation – never underestimate the temptation for your audience to read ahead.



Displaying Data

Every scientific presentation needs to address the thorny issue of which data to display and how best to display it – your own data, someone else's data, old data or even made-up data. Presenters are almost always guilty of including too much information in their on-screen charts, graphs, tables and/or figures. You must always ask yourself how much detail you really need to make your point? Avoid 'data-dump' slides – too much data on a slide WILL lose your audience. Data-dump slides often need to use small fonts – making it difficult to read axes, differentiate between data groups and/or error bars in addition to making it difficult to follow data points. They are also associated with excessive use of laser pointers. Although the laser pointer can be a source of amusement and relief (from tedium) for many audiences, the distraction ruins the flow of your narrative.



Not giving appropriate consideration to how you are displaying your data is a common mistake. Dropping an image of a graph or table from a learned journal into your presentation is inconsiderate to your audience. The font sizes are often too small to read and there is often far too much unnecessary information. In addition, the format of the image is unlikely to share the 'look and feel' of the rest of the presentation (as defined by your template or theme). You should consider re-drawing your images so that they fit with the presentation's colour-scheme and typography. Images should also be designed to highlight specifically the point you want to make.

There are many resources available that describe how best to display tables, figures and graphs [3, 4]. It is important to remember that, repeated slides that display slightly different data using the same format will lose your audience by the third slide. Mix it up a bit:

- Pie charts are good for displaying percentages – but limit slices to 4 – 6 and contrast groups with judicious use of colours or by exploding slices.
- Use vertical bar charts to show changes in quantity over time.
- Keep the number of bars to 4 – 8.
- Use horizontal bar charts to compare quantities.
- Line charts are good for demonstrating changes over time and can be augmented with annotations commenting on trends etc.

Tables are frequently used for data-dumping. They are well suited to side-by-side comparisons of quantitative data. Limit the size of any table to no more than five rows and five columns. Inserting a table from a scientific manuscript generally means inclusion of unnecessary data, small font size and lack of clarity. Furthermore, tables lack a certain something when it comes to audience engagement. Consider whether there is another way to display your data.

Finally, if you must use a highly complicated image it is advised that you 'build' the slide as you progress. Be gentle on your audience and they will thank you by not checking emails on their phones, talking to the person next to them or falling asleep. Describe each aspect slowly and clearly as you add it to the diagram, drawing your audience's attention to key points.

IF YOU ARE NOT GOING
TO TAKE TIME TO
EXPLAIN SOMETHING
THEN REMOVE IT
FROM THE SLIDE



An interview with... our designer

Q

What is the most common mistake?

A

Overly busy slides. It usually results from a combination of two common errors: putting too much information on a slide and the desire to include a flashy design 'feature' such as an unnecessary animation or meaningless image. 'Keep it simple' and 'less is more' may be design clichés – but for a reason. Authors need to focus on the simplest way to communicate one clear concept to their audience – this rarely involves whiz, bang or pop! The less clutter you have on your slide, the more powerful your overall message will be.

Q

What is your pet hate?

A

I have two. The first is when a table or graph is copied directly from a journal article with no thought given to how it will harmonise with the presentation as a whole. It is always worth reworking the content so that it only contains the information you need and fits with the deck's theme. The second is the fear of 'open' or negative space. I will never understand why people insist on filling it with logos and other unnecessary graphics or want to include text boxes that do not contribute to better understanding. Nothing to say? – just leave the bottom part of the slide empty!

Q

Do you follow any 'secret' designer rules that you can share?

A

Not really. People love citing rules such as the 'Rule of Thirds'. This is a design principle in which you imagine your slide to be divided into thirds, both vertically and horizontally, creating a grid. The points where the lines intersect are called 'intensity spots' where you are advised to place the point you want your audience to focus on. However, a designer normally goes with what 'feels' right. In the case of the design of scientific slides the real art is in distilling down the key point of a slide to make into its simplest visual cue.

Q

Can you think of a quick tip for would-be slide designers?

A

We all recognise the importance of establishing a theme for a presentation but using the same slide template can get repetitive and lose your audiences attention in longer presentations. You don't want every slide to look the same. You can give the audience a visual cue that you are moving from one subject to another by subtly changing the design. For example, when moving from Methods to Results. You can try changing from a dark background with light text to a light background and dark text or swapping the primary and secondary colours.



Animation, transitions and builds

Modern presentation programs come with the capability to deliver a broad range of 'effects' such as animations, transitions and builds as well as offering the opportunity to include video and audio material. When used judiciously these tools can add to the overall impact of a presentation; however, audiences quickly tire of these effects and research has shown that when there is movement on the screen an audience's attention is immediately drawn to the movement, breaking their concentration. Although entertaining, these effects should only be used where it reinforces a key point – remember, you are not Steven Spielberg! Audiences judge the quality of a scientific presentation on their interest in the content, not on how many PowerPoint 'features' you have managed to squeeze into a 15-minute presentation.

Points to consider:

- Before you add any special effects ask yourself if it is really necessary – would the point you are trying to emphasise and/or communicate be equally strong without the effect?
- Use builds for bulleted lists to stop your audience from reading ahead, particularly when you don't want them to miss the emphasis you plan to put on specific points. But (please) don't use it on every slide
- Avoid 'sound-effects'. We can't imagine any instance when it might be appropriate

Overall, these effects tend to add little to the audience's experience. They will have seen it all before and even with slick transitions, they will slow the flow of your presentation and quickly become annoying. It might also create speculation on whether the content or the presenter is so uninteresting and dull that the special effects are necessary to keep the audience awake.

And finally...

Presenting has become synonymous with reading bullets from slides and has inspired terms like 'power-pointless' and phrases like 'death by PowerPoint'. Although it has allowed many people to give presentations they may otherwise have found difficult (for one reason or another), it has also fostered an acceptance of PowerPoint mediocrity. Most often, poor slides are ineffective because they fail to properly communicate your information or capture your message. Be different – take a step back from the computer.

Humans love stories; hearing them and telling them. Giving a presentation is no more than glorified story telling. Plan to engage with your audience rather than just showing slides. Enjoy the experience. Share anecdotes. To better achieve this spend some time in the Slide Sorter to establish a natural and logical flow that fits with your narrative. From the Slide Sorter you will be able to identify extraneous information and see where you can promote understanding by breaking up complex issues into chunks or segments. A great story has a great purpose – when you have left the podium the audience should know why you were there and why they spent the last 15 minutes listening to you.

If our summary feels overwhelming or if you are a visual learner you might find the video on YouTube of Don McMillan's presentation 'Life After Death by PowerPoint' to be an easier and more amusing means of digesting this information [5].

References

1. Mayer, R. (2009). *Multimedia Learning*. New York, NY: Cambridge University Press.
2. Paivio, A. (2007). *Mind and its Evolution: A Dual Coding Theoretical Approach*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
3. Few, S. (2004). *Show Me the Numbers: Designing Tables and Graphs to Enlighten*. Oakland, CA: Analytics Press.
4. Sanders, L. and Filkins, J (2009). *Effective Reporting* (2nd ed.). Tallahassee, FL: Association for Institutional Research
5. Life After Death by Powerpoint 2010 by Dan McMillan <https://youtu.be/MjcO2ExtHso>

How can Niche help?

Our medical writing team is experienced in preparing slide decks for a broad range of functions. We can develop the text supporting your presentation and coordinate review cycles and manage team comments remotely or through face-to-face meetings. Drafts can be turned around quickly, within hours if necessary. Our experienced designer can then bring your presentation to life. We can also provide you with a professionally developed set of notes to distribute after your presentation. We can even be on hand to provide support and advice during your presentation as well as providing a report of the meeting.

Next Steps

We created this Insider's Insight into Creating Better Slide Presentations to share a few helpful pointers and learnings that we have gained over the years. If you are interested we would be happy to share more of our experience with you and discuss how you can get more out of your presentations.

People are capable of holding only a few pieces of information in their short-term memory at any one time. Our job as presenters is to make the message clear, memorable and entertaining. Take note of our guidance and take pity on your audience – everyone will benefit.

I hope that you found our guide useful. If you would like to discuss support for any of your upcoming presentation challenges please contact me using the email address below:

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Note to the reader

We thought long and hard before we started writing this Insider's Insight. Originally, we thought that the obvious thing to do was 'show' rather than 'tell'. However, we eventually concluded that perhaps the best way to be different from other 'guides' was to adopt an alternative approach. There are plenty of examples of guides on how to develop great presentations out there – and they all provide examples – and yet people still create and give poor presentations. Is that approach working? What we have tried to do is put together a brief document where every sentence has something useful to convey – we hope thereby providing useful insight rather than pages and pages of flashy examples prepared by experienced designers.

Get in touch



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