Presenting Science

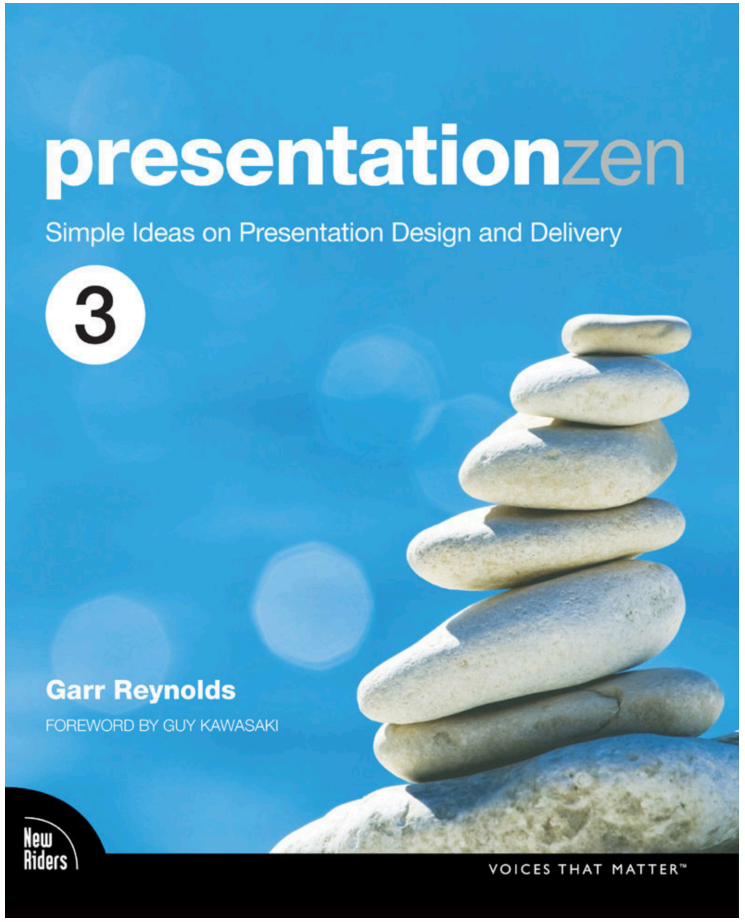
Run from Death By PowerPoint towards Presentation Zen

Death By PowerPoint

- Too many slides
- Too much information on one slide
- Poor quality graphics
- No theme
- No structure / order
- No story
- We have all seen it
- We have all done it
- Take this slide, for example.

Presentation Zen
Story
Theme &
Structure

Presentation Zen



A book and presentation philosophy championed by Garr Reynolds.

Focus is on improving business pitches but covers teaching as well.

Emphasis on storytelling.

Presentation Zen

Three main stages of a presentation:

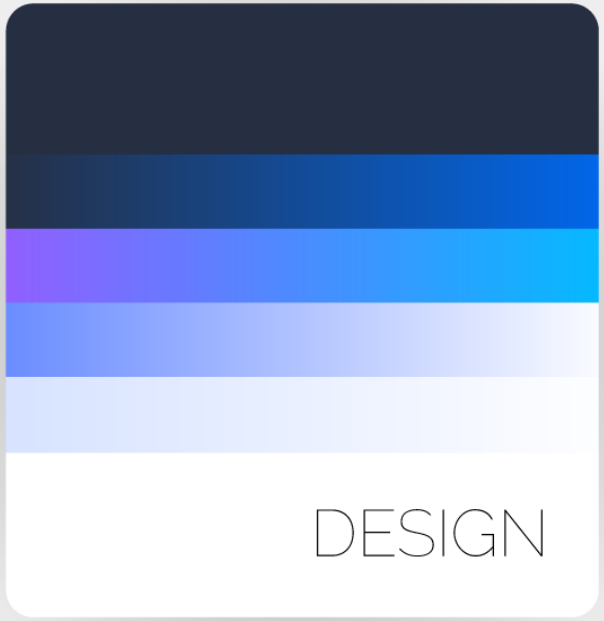
Preparation, Design, & Delivery

More info: http://www.garrreynolds.com/preso-tips/

Presentation Zen: Preparation

- Close your laptop – work offline/analogue
- Know your audience.
- Understand why you are speaking (invited lecture, submitted an abstract/paper, keynote, public interest talk, workshop, etc.).
- Organise your story: storyboard, outline, revise, remove.
- Give yourself the elevator test: Can you tell your story in under 1 minute?

http://www.garrreynolds.com/preso-tips/prepare/


DESIGN

Presentation Zen: Design

- Keep it simple – the slides compliment the speaker / help the audience.
- Limit text, animations, transitions.
- Maintain a theme between slides, charts, graphics.
- Use high-quality graphics.
- PowerPoint has a **slide sorter mode** – use it!

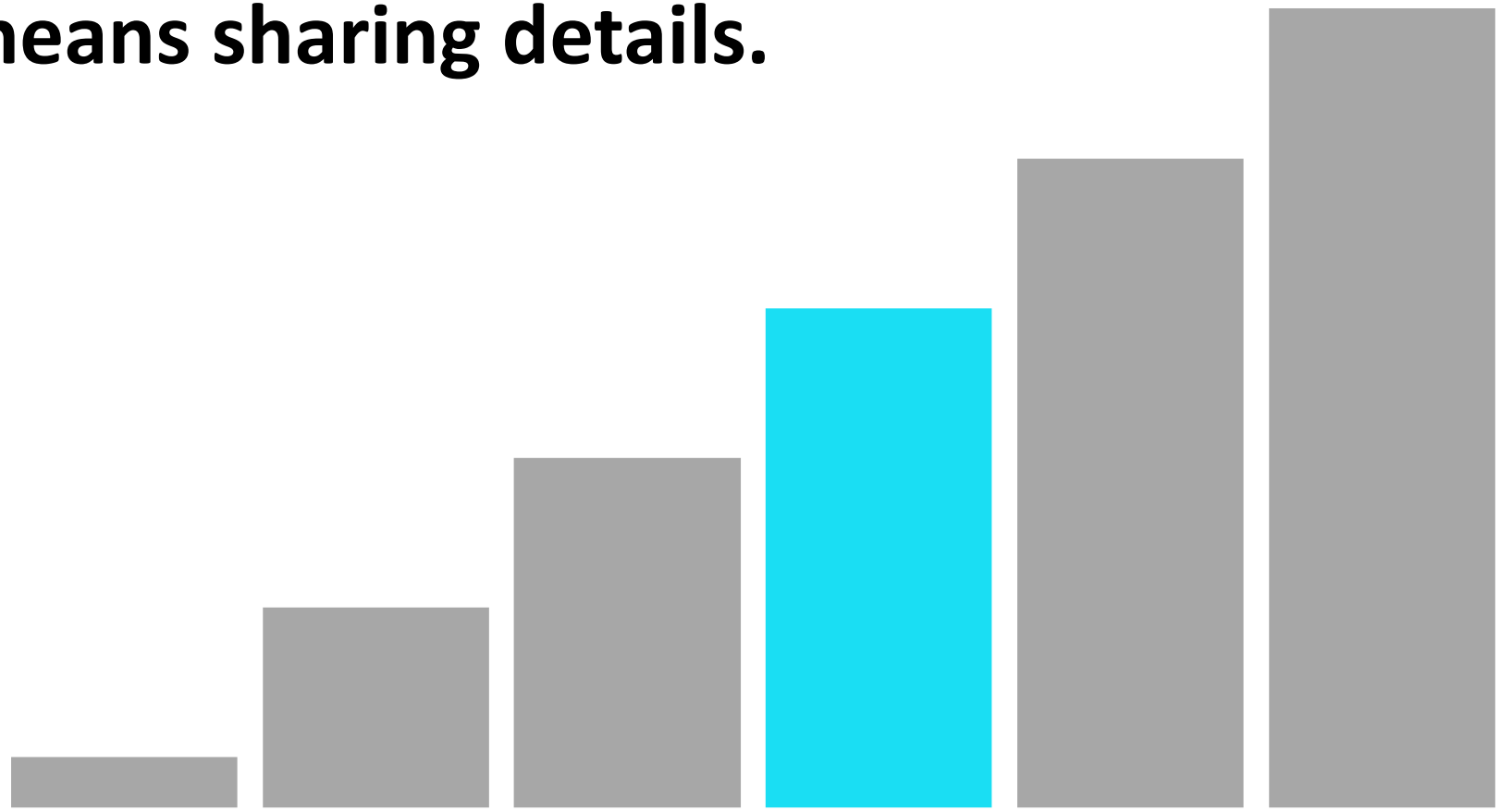
http://www.garrreynolds.com/preso-tips/design/

Presentation Zen: Delivery

- Be passionate about your topic. If you don't care no one will.
- Start strong – make a good first impression.
- Move around; use a remote.
- Err on the side of brevity.
- Be kind. To your audience, your subject matter, your colleagues.

http://www.garrreynolds.com/preso-tips/design/

Presenting science means sharing details.



Balancing Details & Zen

- In science, our work needs to stand up to scrutiny.
- In papers, we go to great lengths to present our methods and results thoroughly and convincingly.
- In *most* conference presentations, we don't need that much detail.

Investigating face veneer check development in decorative plywood panels: the impact of four common manufacturing factors

Michael Barnard · Scott Leavengood · Lech Muszyński · Lisa Gania

Abstract

An optical method based on digital image correlation was used to investigate the impact of four decorative plywood manufacturing factors (core type, veneer type, adhesive type and lathe check orientation) on face veneer checking. The four core types were: combination core, medium density fibreboard, particleboard, and veneer core. The four veneer types were: peeled 0.684 mm, peeled 0.706 mm, sliced 0.508 mm, and sliced 0.564 mm. Both loose-side out and tight-side out lathe check orientations were used. The adhesive systems were urea–formaldehyde, polyvinyl acetate, and soy-protein based. 96 treatment combinations with 8 replicates were tested. All specimens were exposed to harsh but realistic drying conditions (approximately 30°C and 20% relative humidity) for 4 h during inspection. Checks were detected on 428 out of a total of 765 specimens (56%). The estimated mean check densities (area of checking per unit area) indicated some unfavourable factor combinations. All factors had some degree of interaction with one another and check development could not be attributed to a single factor examined in this study. The data were fit to a generalized linear mixed model based on Tweedie's compound Poisson distribution. Confidence intervals were calculated via bootstrapping. The check density estimates produced by this model can be used to cautiously guide manufacturers as they decide on panel components. The broader use of the model is to highlight the complexity of the problem and guide future research in this area.

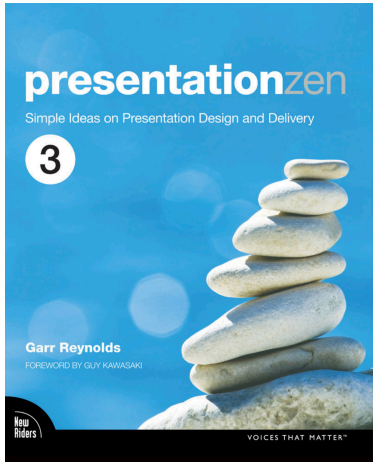
1 Introduction

Decorative hardwood plywood panels are wood-based composites comprised of hardwood veneers bonded to centre layers (or "cores") which may be veneer, lumber, particleboard, medium density fibreboard (MDF), hardboard, or a combination of these materials (Stark et al. 2010). They are commonly used in applications where quality appearance is desired, including cabinetry, furniture, fixtures, wall and ceiling panels. In uses where appearance is most critical, any defect in the face veneer can lead to complaints by the customer. For many years a common and costly customer complaint has been checking in the face veneer (Holcombe 1952; Cassens et al. 2003; Leavengood et al. 2011). No standard stipulates the minimum wood-tissue separation to qualify as a check, and no study has assessed end-user views on acceptable levels of checking in finished panel products. Therefore, based on physical examination of panels that produced customer complaints, checks in this study were defined as separations of the wood tissue along the fibre direction, greater than 0.2 mm across (i.e. in width) and longer than 1 mm (Barnard 2012). When the surface is exposed to a low humidity environment, moisture gradients between the face veneer and core materials develop; variable shrinkage rates between the face veneer and the core material generate drying stresses, which are the principal cause of checking in hardwood plywood products (Gillespie and Hanover 1990; Forbes 1997; Schramm 2003; Cassens et al.

Springer

Paper level details

Zen



Balancing Details & Zen

European Journal of Wood and Wood Products (2019) 77:965–979
https://doi.org/10.1007/s00107-019-01456-2

ORIGINAL

Investigating face veneer check development in decorative plywood panels: the impact of four common manufacturing factors

Michael Barnard[1,2] · Scott Leavengood[3] · Lech Muszyński[4] · Lisa Ganio[4]

Received: 13 December 2018 / Published online: 13 September 2019
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Abstract
An optical method based on digital image correlation was used to investigate the impact of four decorative plywood manufacturing factors (core type, veneer type, adhesive type and lathe check orientation) on face veneer checking. The four core types were: combination core, medium density fibreboard, particleboard, and veneer core. The four veneer types were: peeled 0.684 mm, peeled 0.706 mm, sliced 0.508 mm, and sliced 0.564 mm. Both loose-side out and tight-side out lathe check orientations were used. The adhesive systems were urea–formaldehyde, polyvinyl acetate, and soy-protein based. 96 treatment combinations with 8 replicates were tested. All specimens were exposed to harsh but realistic drying conditions (approximately 30°C and 26% relative humidity) for 4 h during inspection. Checks were detected on 428 out of a total of 765 specimens (56%). The estimated mean check densities (area of checking per unit area) indicated some unfavourable factor combinations. All factors had some degree of interaction with one another and check development could not be attributed to a single factor examined in this study. The data were fit to a generalized linear mixed model based on Tweedie's compound Poisson distribution. Confidence intervals were calculated via bootstrapping. The check density estimates produced by this model can be used to cautiously guide manufacturers as they decide on panel components. The broader use of the model is to highlight the complexity of the problem and guide future research in this area.

1 Introduction

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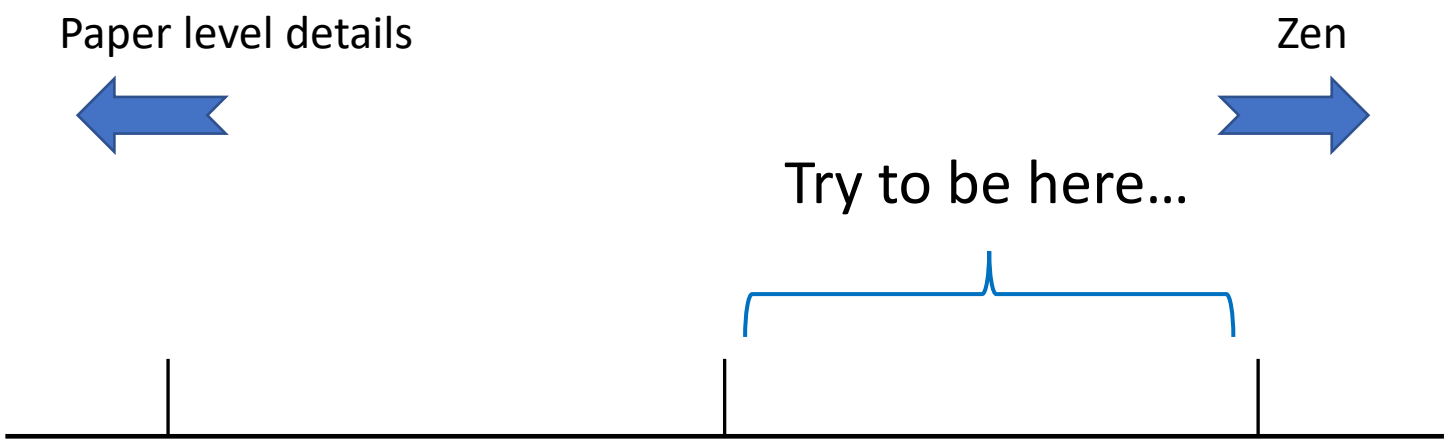

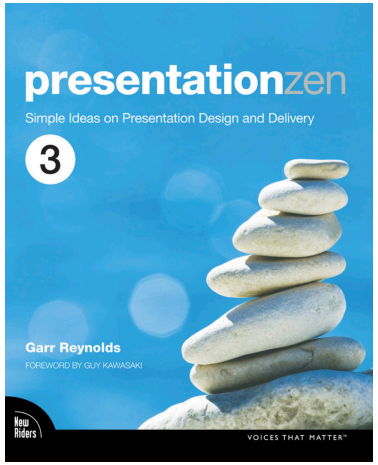

Some strategies to balance

- Include more details in the slide, but don’t mention every item. Leave that for a reader/viewer later.
- Include hidden slides that are made available later.
- Make an alternate presentation for sharing.
- Make a recorded version of you giving the presentation and include extra slides with more details at the end.

Design suggestions

- If presenting on an unknown computer, use built-in fonts in pptx. If presenting in PDF, you can use your own fonts. Sans serif are good for most projectors.
- Avoid tables. Use charts.
- Avoid excel/ppt charts.
- Avoid built-in templates.

Presentation suggestions

- You don’t need an outline; remove it.
- Practice before you give your presentation.
- Humour is good, but keep it professional.
- Remember you’re speaking to the audience, not the screen.

Presentation suggestions

- If questions are allowed, leave time for them.
- Anticipate questions. Have a few extra slides ready at the end of the deck.
- The slides are there to support the story, not tell it. Don’t read the slides.

Presentation resources (added after class)

- The @iamscicomm twitter account has a lot of helpful tips and advice in a wide variety of science communication topics, including presentations.

- For more presentation specific advice, Dr. Echo Rivera @echoechoR has helpful resources (see: https://www.echorivera.com/blog)

Interim ”Assignment”

Due 10h Tuesday 12.1.2021

Watch Garr Reynold’s presentation at TEDxKyoto 2014

https://www.youtube.com/watch?v=YbV3b-l1sZs

Read the follow-up blog associated with the presentation:

https://www.presentationzen.com/presentationzen/2014/11/10-tips-for-improving-your-presentations-lectures-speeches.html