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PowerPoint Usability: Q&A with Don Norman

by Cliff Atkinson

*What does one of the world's leading authorities on usability say about PowerPoint? As cofounder of the **Neilsen Norman Group** and author of the classic **The Design of Everyday Things**, **Don Norman** is a strong advocate of user-centered design and simplicity. Surprisingly, Norman disagrees with PowerPoint's most vocal critic, information design guru **Edward Tufte**.*

Cliff Atkinson: *Don, PowerPoint has been widely criticized and lampooned in the media lately. From your perspective, what do you think is the problem with PowerPoint?*

Don Norman: PowerPoint is NOT the problem. The problem is bad talks, and in part, this comes about because of so many pointless meetings, where people with - or without - a point to make - have to give pointless talks. The problem is that it is difficult work to give a good talk, and to do so, the presenter has to have learned how to give talks, has to have practiced, and has had to have good feedback about the quality of the talks - the better to improve them.

CA: *What do you think of Edward Tufte's criticisms of PowerPoint?*

DN: Tufte misses the point completely. His famous denunciation of the NASA slides, where he points out that critical information was buried, is not a denunciation of PowerPoint, as he claims. The point was buried because the presenters did not think it important. They were wrong, but it is always easier to find blame in hindsight than with foresight. The slides matched their understanding of the importance of the issues.

Tufte is criticizing the symptom. Tufte has politicized this to benefit his seminars - but the correct culprit is the erroneous analysis of the tests, not the way the engineers decided to present it to their audience.

Tufte is correct when he complains about misleading data and bad summarization that oversimplifies and may even omit important footnotes and qualifications about the data. Tufte is wrong when he confuses great depth of detail with a good talk.

Tufte would overwhelm the talk audience with more data than can be assimilated in a talk. He doesn't seem to realize that there are really three different items involved here:

1. The notes the speaker will use (which should be seen only by the speaker).
2. The slides the audience will see.
3. Handouts that will be taken away for later study.

A talk can NEVER present as much information as a written paper. Talks should be pointers to the important material. But neither the spoken talk nor the accompanying notes - PowerPoint or not - should be confused with or used for the real information.

CA: *So there's a difference between the study document and the oral presentation?*

DN: Any dense, detailed information that requires study to understand can NOT be presented in a talk - it can be summarized and described, but the study and concentration required for

understanding should be done elsewhere. Talks are for summaries.

CA: *Should people use bullet points in PowerPoint presentations?*

DN: Bullet points and outlines are not bad ideas. A proper outline structures the talk. Proper bullet points summarize important concepts. The problem comes about when speakers prepare a dense set of outlines, turn them into bullets, and mindlessly read them to the audience. But this problem existed long before PowerPoint. I used to have to sit through dull, boring talks by government officials and military contractors long before personal computers, when slides were hand drawn or typed and projected by overhead projectors.

CA: *Why is it important for PowerPoint users to keep the audience in mind when designing slides?*

DN: All good design involves seeing things from the point of view of the user of the design. Preparing a good talk is design. And it is critical to see things from the point of view of the listener or viewer.

CA: *How does someone determine the right amount information an audience can absorb during a presentation?*

DN: There are good guidelines already in existence. No more than one idea per slide, for example. Tufte would disagree with this. Once again, that's because he likes to spend hours studying each slide. Well, that is for the handout. The talk has to be dramatically condensed.

CA: *When should people use PowerPoint, or not?*

DN: Slides should be used only when there is a need for visual aids. Most talks have no such need. Outlines and bullets are aids to the speaker, but the speaker should use them as cues to talk - not read, not lecture - talk - with the audience. There is no need for the audience to see the speaker's private notes. The best talks I have ever heard had no slides at all. The best talks I have ever presented had no slides. And today, my best talk has a lot of photographs and only a few slides with words - only three words total, to be precise, for the entire one hour talk (not counting the title slide).

CA: *What do you think of the presentations of Larry Lessig, who has been called a 'PowerPoint virtuoso'? (see interview [here](#))*

DN: I thought Lessig's talk was excellent, but I wondered why he used any slides at all. Sure, when he presented his movie clip, he needed to show something on the screen, but even though his slides were clever and well done, the fact that he used them meant the audience had to sit in the dark. I prefer it when the audience can see the speaker and, in turn, as a speaker, I like to see the audience.

So although Lessig's slides were a good example of PowerPoint, personally, a better example would have been for him not to have used any slides at all.

My favorite slide is one that is all black. I ask the facilities people to turn up the lights when that appears. Then I can communicate with the audience. When I show slides - and almost all of my slides are photographs that illustrate things I can't otherwise describe - then the lights go down. But for talking, it is best to have no slides, and all the lights.

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Cliff Atkinson is an independent management consultant who helps organizations solve problems related to PowerPoint. Visit his website at www.sociablemedia.com, read more articles and interviews [here](#), or email him [here](#).

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