Effective Preparation and Presentation of a Technical Paper

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What makes an "Effective Technical Presentation"?

An effective technical presentation, quite simply, is a combination of a desirable topic well presented to a receptive audience. This paper will not only be instructional in the technique, but also, it is hoped, an example of such a presentation.

Obviously, since you are reading this paper (and attending the presentation), the question of a receptive audience is taken care of. As for the desirable topic, I hope that you will come out of this with a fire in your heart and a topic in your head. And next year, you'll be the one doing the writing and the talking.

Finding a good topic

So, what makes a good topic? What do you do well? What is that your peers, your supervisors, your customers, compliment you about? Look at the conference program here. Are there topics that you believe you might be able to expand upon? Or is there a topic that you are familiar with, but would like to learn more? Why not do the research, present the information and accept the accolades?

Once you believe you have a good topic, pass it by peers whose opinion you respect. This is for a "reality" check. It can also help you to refine the topic and to develop the presentation. Frequently, an experienced presenter can help you both in your quest for a topic and in the presentation itself.

Identifying your audience

One of the tricks in making a paper "effective" is in finding the right audience. Presenting a paper on OS390 JCL at InterWorks is not an effective paper. A paper on building and maintain Ignite-UX golden images at the same conference would be very desirable.

If you think you have a good topic, look at the call for presentation. Most will give you a good idea of what the conference is looking for. Look at the proceedings from previous conferences. One thing that can help is to ask your peers. Finally, think about whether you would be attracted to the paper were you attending the conference. After all, if you can't interest yourself in your paper, how do you expect to get me to attend?

Writing the paper

Oh great, now you are looking at that blank piece of paper. Erh, does anyone still use paper? At any rate, the hardest part of writing the paper is the first hour. I can't guarantee that my techniques will work for you, or that it even works for me. On the other hand, any idea that gets you started is great. It is also important to keep in mind any style guide that the conference has established. Finally, use your own best judgement as to what you like to do.

I use MicrosoftTM Word. One of the options I use is to start with an outline. If you use this, you can start organizing your thoughts and ensure that you are proceeding as desired. The outline can be more easily rearranged if you find some changes are warranted. And, of course, at this point, your research will be continuing and an outline approach can both help and give you flexibility.

Once the outline is ready, start filling in. One bonus of using the outline approach is that you don't have to be linear in your writing. If one section leaves you temporarily stumped, go to another. This nonlinear writing technique also makes walking away from the paper for a period of time easier.

You may find that graphics, pictures and the like are useful in getting your message across. Use them. Find the best tool for the job. When you insert the image, make sure it fits in best with the surrounding text. If need be, put a label on image and refer to it. Remember, however, that while a picture may be worth a thousand words, make sure that they are quality words.

Putting the "show" together

Next comes the actual presentation. At this point, you will need to know what style guides, if any, are required. The method of presentation will determine the format, background, etc of the foils. As recently as four years ago, most presentations were made on transparencies. As a result, the backgrounds were clear, the text was black and the images, if used, were gray.

Now, however, most presentations are made using computers to display projected images. This gives a great deal of flexibility in the presentation, but a certain amount of restraint must be shown. The most common method is with MicrosoftTM PowerPointTM. PowerPoint does an excellent job of automating the presentation. There are a great number of options on how to animate a presentation mean that you will need to make a careful study before starting.

As with the paper, outlining frequently helps. However, the outline for the presentation is frequently different from a paper. Consider the flow of the presentation. Allow enough time for each foil to be fully covered. Most speakers feel that 25 to 30 foils are about right for a one hour session. This gives some time for the inevitable Q&A and enough time to change out the room.

Below is one example of a "typical slide". In the example, a few of the common rules are covered. Of course, rules are sometimes broken, but try to stay consistent. What can't be shown in a paper is the animation. In this case, the title would come on, and each of the bullets would slide in from left to right with each mouse click (my personal choice).

Typical Slide

- Try to limit the length of each entry
- If need be, use sub-bullets
 - using these reduces the number of bullets
- Not more than five bullets, three is better

The color scheme chosen is actually one of the defaults. It works quite well when shown from a video projector and shows most pointers clearly. Speaking of pointers, if you use a laser pointer, don't go wild with it. The pointer can distract from the presentation.

Don't choke, talk!

Fear of speaking is actually the number one reason most people list for not making presentations. In fact, speaking in public can be fun. Most speakers are nervous at first. I still have a little bit of a shake. But practice always helps. If you really have problems, and want to be a speaker, try Toastmasters.

When practicing for your presentation, don't make the mistake of reading it silently to yourself and thinking you've worked on it. After you are happy with it, try presenting to some friends for comments on style, but not content. Then, present to one (and only one) peer whose opinion you trust. This will give you a review of the content. Remember, too many helpful hints from too many people can ruin the presentation. Finally, if you have time, practice with your co-workers. Or even better, present at a local user's group before a regional or national conference.

When you are totally ready and your presentation is complete, make two copies of it on floppies. This way, in the event of a total catastrophe, you can still present the paper.

Reap the rewards

There are of course, benefits to making presentations. Reduced or free admission to the conference, frequently employers are more willing to pay the additional expenses when they know the company will be presented in a favorable light. Finally, some employers even pay their people to present at conferences. That's a nice benefit. Of course, there's also the respect you garner from your peers. But, be careful. It can be addictive.