

## **What I Learned This Month: Collaborative Writing**

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Last year at CMG I enjoyed several good conversations on a variety of topics. While the sessions at CMG are the main reason I attend, these conversations with my peers over lunch or PARS are equally important. Often it is refreshing just to get confirmation that I'm not the only one facing unique challenges. Occasionally I learn I am taking an uncommon approach to something. The road less traveled often needs to be evaluated more closely, so knowing you are off the well-worn path is invaluable. Sometimes somebody will suggest a solution for a problem that has been vexing me for some time. And of course it's good just to rant about the state of something with a like-minded new (or old) friend.

At PARS last year I met Nicole Arksey and it quickly became obvious that we shared a passion for good data visualization. Or at the very least we liked to rant about poor visualization choices. Nicole's boss was there and proclaimed that we should write a paper on the topic. In January we decided that we would try to co-author a paper on Data Visualization. I'm happy to say that that paper has been accepted for CMG 2012.

I had some small trepidation about co-authoring a paper: it had been many years since I've done any sort of collaborative writing. But I was also excited. For me, writing is always a learning experience. By adding a second person to the process I expected that I'd learn even more. Indeed I did learn several things about data visualization from Nicole in the process (and hope that she has also gotten some good ideas from me). You can come to our presentation at CMG 2012 to hear about those, but I also learned a few interesting things about collaborative writing that I thought I'd share here.

First, physical distance isn't a significant barrier to collaboration. I'm located in Columbus, Ohio and Nicole is in Vancouver, British Columbia. That is an international border, three time zones, and 2000 miles (or 3300 kilometers from Nicole's perspective) between us. But email, instant messaging, and inexpensive phone call plans makes staying in touch relatively easy. While we were writing we scheduled regular weekly meetings to discuss our progress. The discipline of having the discussion meeting scheduled was useful to ensure that we continued to make forward progress.

Our work styles (for at least writing a paper) are somewhat different. Nicole likes to thoughtfully lay out a plan for what needs to be written, while I'm eager to jump right in as soon as I have the vaguest notion of what I want to write. I think we tended to balance each other out. It certainly is easier and better to write to an outline, but I'd like to think that my push to just get some words written was useful as well. Nicole may very well disagree on that point, though!

For actually writing the paper, we used Google Docs. I think both of us had very minimal experience with Docs, but it turns out that the word processor is very useful for this sort of distant collaborative writing as multiple people can edit the

same document at the same time. The updates are reflected in real-time across both people's view of the document. Moreover, the software tracks where each person's cursor is, so you can find where the other person is editing and see that person's updates as they type them. Not only is this very cool, it makes phone discussions about the paper all the more productive. If we were discussing how to rephrase something, one of us could just type out a new sentence and we could both immediately read it and see how it fit into the flow. Or if we wanted to re-arrange something we could do so and both of us could immediately see how it looked with the changes. Because Google Docs has pretty sophisticated undo and previous version support, making significant changes like this "just to see" was safe and easy. We also made good use of the ability to add comments to segments of the text. It was always fun and interesting to open the document and see what Nicole had written or what comments she had left me.

Once we were ready to submit the paper, we were able to export it to Word. Because I had originally created the document from a shell of a previous paper, it only needed a few minor formatting tweaks to bring the formatting to CMG standards. From Word, we exported a PDF for final submission.

For doing the presentation we decided to stick to PowerPoint, primarily for its ubiquity, even though Keynote is Nicole's preference. We used a shared Google Drive folder to store the presentation. This allowed both of us to open, update, and save it back to the same spot. Because the editing was happening outside Google Docs, the conflict resolution was a little more problematic: it seems the process works best when only one person is updating it at a time. Here our time zone difference worked for us instead of against us as I could be fairly certain that if I wanted to update it at 7 a.m., Nicole was likely not also working on it as it would be 4 a.m. her time!

I have written several CMG papers over the years, but I found the process of co-authoring one to be uniquely different. It wasn't necessarily easier, but it was more rewarding and more fun. Normally I find writing to be a solitary pursuit with an unfortunately long feedback cycle. It was nice to have Nicole's more immediate feedback. I also learned things that I'm sure I wouldn't have if I was doing it by myself. Coordinating your work with another person always adds some overhead (so it's not two authors, half the work), but I think the collaborative process itself was worthwhile, and I'm glad that we decided to co-author the paper.

As always, if you have questions or comments, you can reach me via email at [sachapman@aep.com](mailto:sachapman@aep.com). Or catch us at CMG 2012—we hope to see you there, especially at 1:15pm on Tuesday Dec. 4<sup>th</sup> in room "Brasilla 1/4"!