# Introduction

- this is not about technical troubleshooting (not a lot, anyway), but ways to make one's troubleshooting more effective

- these ideas are not a substitute for solid technical knowledge. They are more an augment than anything else

- there are no absolutes. A lot of these concepts work inter-relatedly, and the same methodology does not work the same way every time. That's where your technical and creative thinking skills will come in

# What's Wrong with the Cookbook Approach?

absolutely nothing, and most of us, with a little creative thinking, have ways of proceeding if the recipe fails. This session hopes to help as well with some other things we can do

# Talk to users

- I know, I know, we all do this, but sometimes, the rigors of our jobs prevent these interactions from being as timely and productive as we like

- depending on how your organizations are set up, try to engage users in regular meetings. At least see if you can talk to group managers regularly to gather input and see they are happy and content with the way things are going...technologically

# Applying the 80/20 rule

- this is also in line with talking to users, but if we spent 20% of our time using an application, it's unlikely that we will know more about that application than someone who spends 80% of their time in it

- sometimes, it's useful to identify and retain (with food, preferably. Pepperoni pizza normally works for our designers) these application stalwarts and work with them to identify and log application-specific gotchas

# The Case of the Hidden Dock

in rolling out OS X to our studio last summer, our tech team didn't realize that the same keyboard command to show and hide the OS X dock also activated the Feather Selection command in Photoshop. Granted, it's a relatively easy fix, but thanks to our conversations with the users it was caught before rollout and fixed

Know your users

there is a measure of psychology and sociology (and a few other 'ologies, I'm sure) that all troubleshooters employ in the course of their jobs. Sometimes, these weigh much more than technical knowledge

# The Case of the Dropped Network Connection

one of our mobile users (regular road warrior, laptop in tow), would regularly call me when he came back to the office about not being able to connect to the network after changing his location configuration to the office. This was back before I got wireless access set up for the studio (I still discourage users from connecting to the wireless network for non-Internet activity)

the first question we always ask would be "is it plugged in?" to which he would vehemently reply "of course". He was and he wasn't. He connected everything else — external keyboard, mouse, power, USB hub — but would always miss the ethernet cable. So, while the "is it plugged in" question would eventually resolve the problem, it didn't take long for my first response to be a definitive "your ethernet cable isn't plugged in"

# Statistics are your friend, and not

typical troubleshooting also depends on statistics to be effective. Sometimes, we start with the most likely thing that could have gone wrong and work from there

doesn't mean it works all the time

# Abraham Maslow knew what he was talking about

I'm not just talking about the quote most troubleshooters know him for, "If the only tool you have is a hammer, you tend to see every problem as a nail."

his Hierarchy of Needs can be adapted to cover most of what users need and want, and by extension, enable us to seem physic and predict problems before they happen (I am working on a proper graphic for this). Nothing like wowing the masses!

**Need for Self Actualization**
Need to realize our fullest potential

**Esteem Needs**
Need for achievement, education, competence, and respect

**Belonging and Love Needs**
Need for love, acceptance, and belonging

**Safety Needs**
Need for safety and security

**Physiological Needs**
Need for food, water, shelter, oxygen, and sleep

**Maslow's Hierarchy of Needs**

# The Case of the Misbehaving Mouse

we'll end with this little tidbit, on what happens when good technology happens to bad people.

I have Bluetooth mice and keyboards set up in our conference rooms at the studio, which work pretty well, except for needing their batteries replaced every so often. However, my boss doesn't realize this, so if the batteries were weak, and the mouse became unresponsive, he would repeatedly bang the mouse on the table trying to get it to work. This broke the mouse, of course, so it took me a little while to find out exactly why the mouse would refuse to work after replacing the batteries

# Conclusion

- No method is 100% effective, 100% of the time

- But taking a more multi-disciplined approach will enable more productive solutions and happier users