



The Ronco Pocket Engineer

What constitutes an engineer? What makes one tick? I'm sure there are a myriad of answers but to me there are four basic ingredients to the recipe. Take three parts scientist, add two parts tinker, fold in two parts artist, and sprinkle with four parts guru.

Engineers have the scientific drive to search, explore, and discover how things work. A philomath by nature, engineers continue to learn inside and outside their field. Check out their cubicles overflowing with books, manuals, magazines, and journals.

Unlike their scientific colleagues, who loose themselves in a boundless search for knowledge, engineers are pulled back to reality by a chronic urge to tinker. While most kids are playing with their toys on Christmas day, engineers tear their toys apart to see the motor, controller, or mechanics. Once satisfied, they use the parts to create new toys that resemble those found by Woody and Buzz in Sid's room – who, by the way, is destined to be an engineer. This is the trait that leads an engineer's parents, spouse, or manager to suspect that some part of the engineer's brain is not fully developed.

Like artists, engineers create but their creativity takes a different form. Artists start with a blank canvas and end up with something that is observed and valued by its appeal. Engineers use existing materials to form a bricolage that is used and valued by its utility. The Internet is a prime example, i.e., lashing together the complexities of assorted computers, long-standing phone lines, modern fiber optics, ubiquitous cable, and strings of code to create a new form of communication. NASA engineers were at the zenith of their mission making an air filter out of spare parts for Apollo 13.

The leitmotif of an engineer is the self-confidence of always being right. No matter what the circumstance, engineers feel they know the answer. An engineer considers himself the guru of gadgets, expert of electronics, maharishi of mathematics, professor of programming, and sage of systems. At a company party, I had a graphologist analyze the handwriting of my team. One character trait that appeared in every engineer was the need to be right. The graphologist asked for the group leader. I stepped forward. She said, "I'm so sorry."

While an engineer's self confidence facilitates the drive to explore, tinker, and

create, it becomes an Achilles heel for implementation. Implementation requires support and funding that comes from management or venture capitalists. Few engineers are blessed with the talent to influence, persuade, and convince a manager or venture capitalist.

Engineers present somniferous ideas thinking they have the only answer, unaware that a manager is bombarded with ideas daily and struggles to sort out the lot. Engineering managers relate with Charles de Gaulle, who said after a few years as France's president, "It is impossible to govern a country that produces 457 different kinds of cheese." Well President de Gaulle, try governing a software development team that has 457 different requirements, 45.7 methodologies, 4.57 languages, and 457,000 process improvement ideas.

How can you get a dilatory manager to cogitate your ideas and become more credulous to your point of view? How can you bridge the fissure between engineering insight and management vision?

When the clock strikes midnight, get off the chat line, turn on the tube, and turn to a cable channel. There he is – the prince of pitch, the sultan of sales, the prime minister of peddling, the royal highness of hawking – Ron Popeil. Mr. Ronco is himself, the most successful infomercial pitchman in history.

What, you don't know Ron? Give me a break. I'm sure if we cleaned out your closets, cabinets, or garage we would find a Veg-O-Matic, Mr. Microphone, Pocket Fisherman, food dehydrator, or a can of GLH Formula #9 spray-on hair with his name on it.

If not one of Ron's products, surely we would find a Chia Pet, Thighmaster, or a set of Ginsu Knives. Perhaps we would discover a Flowbee – the ingenious hair cutting system that hooks to a vacuum. Is there a Hairdini hidden in your armoire that will twist your hair into a quick bun in seconds?

You can learn from these ridiculous yet amusing infomercials. I know – you are a professional and would never be so bumpitious. Well listen Mr. Professional: Ron's pulled in more than \$1 billion in retail; what was your latest bonus? Reason and logic have not convinced your pervicacious boss, so maybe you need a little spice in the recipe. Don't let the potboiler products repulse you, look at how they are offered.

First, accentuate the need. Does anyone

really need a Ratoto? Not until you see that baby skin a potato in seconds. While you may see the obvious need for your brilliant ideas, many managers do not. It's your responsibility to help your manager appreciate the need for your brainchild.

Second, your idea has to be demonstrable. My appeal to the Veg-O-Matic was weak at best until I actually witnessed it slicing, dicing, and churning out julienne fries in just minutes! Although your concepts may be more complex than the Inside-the-Shell Egg Scrambler, you need to demonstrate how your idea will work. It's your responsibility to help your manager visualize the use of your *idée fixe*.

Third is repetition. How many times have you seen the Ginsu Knife demonstration? How about Ron's new product the Showtime Rotisserie? The more you are exposed to upbeat demos your subconscious is inculcated into submission. Don't let your ideas ride on one presentation. Indoctrinate your manager with quotidian concepts of your proposal. If your suggestion has a theme song your manager should be humming it.

Finally, curtail the risk. I forked out \$19.95 for Eagle Eye Sunglasses that illuminate fish in 20 feet of water, not because I knew they would work, but because I knew if they did not work, I was only out 20 bucks. It's like riding a bike with training wheels, swimming with water wings, or working with a net. If the worst thing that can happen is palatable, then why not take a gamble? When engineers present their panaceas, managers see slipped deadlines, blown budgets, and lost careers. Package your concept with a set of training wheels. If your manager feels he or she can get on your conceptual bike without serious injury, he or she will be riding in no time.

I can already see you wheedling away. "Boss, you get Object-Oriented (OO) design and the Unified Process (UP) for just \$19.95K. But wait! Fund the project this month and we'll throw a free eXtensible Markup Language (XML) workshop and starter kit. You get OO, UP, and XML all for just \$19.95K. But wait! Fund the project this week and we'll throw in a cup of Java. You get OO, UP, XML, and Java all for \$19.95K, or four monthly payments of \$5K each."

Maybe you should start the presentation with the Clapper.

– Gary Petersen, Shim Enterprise, Inc.