The Effective Organization

April 2009

How to Not Make a Lightbulb

Shoto Funakoshi, the founder of Shotokan Karate, was famous for saying that in the practice of karate, there is no room for error. During my brief study of Shotokan, my instructor told us that American students and instructors did not have the patience of their Japanese counterparts. They permitted a great deal of error until the student approached black belt. At that time, the student was expected to perfect his technique. Over time, American instructors noticed something very interesting: they were producing more black belts than the Japanese. Furthermore, although none of the Americans were as technically proficient, they were beating their Japanese counterparts in competitions far more often than expected.

The reason American black belts were winning so much is that they were creative. They knew all the standard moves, but were also willing to think outside the box. They won because they tried things that their opponents never considered. When they were, quite literally, smacked upside the head, they learned from their mistakes.

A common refrain from corporations is that they value "out of the box" thinking.

There is a secret to creative, outside the box thinking: finding the box. Until you know where the box is, you cannot tell if you are thinking inside or outside of it. Most of the time, these "out of the box" approaches just don't work. While it's possible to get lucky, everyone knows what happens when you depend on luck.

So how do you find the box? As Mihaly Czikszentmihalyi points out, you need to understand the domain, without being trapped by it. The American Shotokan students knew their material: they had mastered the domain. They also were not afraid to step outside what they knew and see what would happen.

By the same token, many companies successfully create products that are outside the box: that creativity comes from a detailed study of the market and the specific area of technology. Google revolutionized search. When Home Depot first opened its doors, it was a young, innovative company that had devised an innovative approach to selling hardware. Amazon.com was one of the first companies to take advantage of selling over the Internet. Apple's iPods have completely changed the music industry. In each case, the founders first studied the domain:

search, hardware, retail, and music; then, they developed an innovative approach to entering that market. Their solutions sprang forth fully formed, much like Athena from the brow of Zeus.

Well, maybe not.

The fact is, that box exists for a reason: it works. There are many tried and true inside the box solutions that work reasonably well. There are also plenty of

outside the box solutions to any given problem. However, when you restrict yourself to solutions that will actually work, the number is considerably smaller. Unfortunately, there's no way to tell which is which until you try. Quite simply, being creative means being wrong a great deal of the time. It means constantly refining and adjusting your plans. How many people remember IBM's microchannel architecture or the Apple Newton?

How a business handles mistakes, especially flashy, expensive mistakes, says a great deal about how creative that business will be over time. Creativity is a process of ranging: sometimes you overshoot, sometimes you undershoot, and sometimes you fail miserably. Eventually, that moment of inspiration comes, and after years of hard work you become an overnight success. Thomas Edison is frequently quoted as saying, "I learned a thousand different ways to not make a light bulb."

That's easy to say. It's hard to live.

So how do you foster an environment that encourages creativity and outside the box thinking?

Start with education. What are you doing to learn and become engaged with the knowledge of your domain? What are you doing to look *outside* your areas of expertise? It's hard to be creative without a constant stream of new inputs and perspectives.
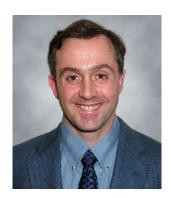
How do you handle mistakes? Are you encouraging experimentation or punishing failure? Does your organization value taking educated risks? If people are afraid to take a chance, it's highly unlikely that they'll produce a whole lot that's really outside the box.

Take breaks. Whether it's spotting the solution to a problem you've been wrestling with all week, or experiencing a truly innovative breakthrough, creative flashes happen after you've taken a break, not when you're stressed out and mentally exhausted. Hard work is important; so is knowing when to let your subconscious work on the problem.

Be patient. Necessity may be the mother of invention, but birth takes time.

You can't force creativity; you can create an environment that makes it likely. What environment are you creating?

If you're thinking continuous improvement, you're thinking...