

Empirical Creativity: Lesson #2 from Jim Collins' Great By Choice

In my [last post](http://stephenblandino.com/2011/12/fanatic-discipline-lesson-1-from-jim-collins-great-by-choice.html) (<http://stephenblandino.com/2011/12/fanatic-discipline-lesson-1-from-jim-collins-great-by-choice.html>), I shared lesson #1, **FANATIC DISCIPLINE**, from Jim Collins and Morten Hanson's book, [Great By Choice](http://www.amazon.com/gp/product/0062120999/ref=as_li_tf_il?ie=UTF8&tag=stephbland-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=0062120999) (http://www.amazon.com/gp/product/0062120999/ref=as_li_tf_il?ie=UTF8&tag=stephbland-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=0062120999). It's the first of three **core behaviors** that mark the 10x companies shared in Collins and Hanson's latest research. The second behavior that allowed 10x companies to thrive during chaotic and uncertain environments is **EMPIRICAL CREATIVITY**.

There is a common perception in leadership that innovation is the key to success. Or, put more plainly, the more innovative you are, the more successful you'll be. However, Collins and Hansen discovered a different reality:

“The evidence from our research does not support the premise that 10x companies will necessarily be more innovative than their less successful comparisons. And in some cases, such as Southwest Airlines versus PSA and

Amgen versus Genentech, the 10x companies were *less* innovative than the comparison....we're *not* saying that innovation is unimportant...We concluded that each environment has a level of 'threshold innovation' that you need to meet to be a contender in the game; some industries such as airlines, have a low threshold, whereas other industries, such as biotechnology, command a high threshold. Companies that fail even to meet the innovation threshold cannot win. But—and this surprised us—*once you're above the threshold*, especially in a highly turbulent environment, being more innovative doesn't seem to matter very much.” (p. 65, 67)

What's essential is that creativity and discipline exist together. “Intel's founders believed that innovation without discipline leads to disaster” (p. 69). In fact, Intel's #1 core value isn't innovation or creativity, it's discipline. Collins and Hansen observe, **“The great task, rarely achieved, is to blend creativity intensity with relentless discipline so as to amplify the creativity rather than destroy it”** (p. 70).

But the key is not just creativity...it's **EMPIRICAL CREATIVITY**. In other words, 10x companies don't innovate blindly, throwing huge amounts of resources at new ideas. They employ what Collins and Hansen call, **“Bullets, Then Cannonballs.”**

The idea is to fire small bullets (test new products, technologies, services, and processes) to see what works and what doesn't. Only after new ideas have been *tested* and *proven* should the organization fire a cannonball. Bullets don't sink the ship, but a cannonball can. Organizations should fire cannonballs (put large amounts of organizational resources and energy into ideas) **ONLY AFTER** they have fired lots of small bullets (testing new ideas to prove whether or not they will work).

Collins and Hansen describe a bullet as, **“An empirical test aimed at *learning what works* and that meets three criteria”**:

A bullet is low cost (the size and cost of the bullet grows as the organization grows)

A bullet is low risk (there are minimal consequences if the bullet goes awry)

A bullet is low distraction (it will not pull the organization as a whole off focus)

A cannonball fired before you gain empirical validation is an “uncalibrated cannonball.” Collins and Hansen observe:

“The 10xers were much more likely to fire calibrated cannonballs, while the comparison cases had uncalibrated cannonballs flying all over the place (the 10x cases had a 69 percent calibration rate on cannonballs versus 22 percent for the comparisons). Whether fired by the 10x case or the comparison case, calibrated cannonballs had a success rate nearly four times higher than uncalibrated cannonballs, 88 percent to 23 percent.”
(p. 74)

This doesn't mean the 10x companies never fired an uncalibrated cannonball. But the few times that they did, they were quick to learn from their mistakes and “returned to a bullets-then-cannonballs approach” (p. 77).

The big idea is that organizations must be creative, but their creativity must be validated by empirical experience.

Sometimes this means simply learning from others so you don't have to fire a single bullet. Other times you'll fire bullets, testing a new idea, product, service, or process. Then you might fire more bullets, and then more bullets. Only after validating your

creativity do you fire the mother load cannonball. Once you find out what works, the key is to turn it into a **20 Mile March** (<http://stephenblandino.com/2011/12/fanatic-discipline-lesson-1-from-jim-collins-great-by-choice.html>).

One of the comparison companies, believe it or not, was **Apple**. Remember, this research looked at 1972-2002, and Steve Jobs didn't return to Apple until 1997. But consider Jobs' first move:

“What did jobs first do to get Apple back on track? Not the iPod, not iTunes, not the iPhone, not the iPad. First, he increased discipline. That's right, discipline, for without discipline there'd be no chance to do creative work. He brought in Tim Cook, a world-class supply chain expert, and together Jobs and Cook formed a perfect yin-yang team of creativity and discipline. They cut perks, stopped funding the corporate sabbatical program, improved operating efficiency, lowered overall cost structure, and got people focused on the intense 'work all day and all of the night' ethos that'd characterized Apple in its early years. Overhead costs fell. The cash-to-current-liabilities doubled, and then tripled. Long-term debt shrunk by two thirds and the ratio of total liabilities to shareholders' equity dropped by more than half from 1998 to 1999. Now, you might be thinking, 'Well, all that financial improvement naturally follows breakthrough innovation.' But in fact, Apple did all this *before* the iPod, iTunes, or the iPhone. Anything that didn't help the company get back to creating great products that people loved would be tossed, cut, slashed, and ruthlessly eliminated.” (p. 83)

Did it work? I think you know the answer. From 1997 to 2002, Apple outperformed the stock market by 127 percent and by 2010 became the most valuable technology company in the world.

The 10x companies fired a great number of bullets...many never hitting anything. They had no idea what would be successful. But as pockets of success appeared, they fired more bullets, validating their creativity, and eventually firing a cannonball.

What looks like an overnight success is often a long, empirical process of try, fail, try, fail, try succeed.

In my next post I'll share Collins and Hansen's final core behavior. Until then, consider their closing question:

“Which of the following behaviors do you most need to increase: Firing enough bullets, resisting the temptation to fire uncalibrated cannonballs, or committing, by converting bullets into cannonballs once you have empirical validation?”