Our minimalism quota has been filled!

Time to eradicate the disease of settling

"Minimalism" is a word that has been used to describe certain forms of art and music. More recently it has become a lifestyle believed to free people from the all-consuming desire to possess. It tries to step out of the trap of consumerism and the belief that happiness can be found in accumulating stuff; that the person who dies with the most toys wins. "Tiny houses" are a recent reflection of this type of minimalism.

Another type of minimalist is defined as "a person who holds minimal expectations for success." This is the person who's always asking, "What's the least I can do…?" For example, what's the least I can do to get a good grade? What's the least I can do to get a good raise?

The managing director of a client in Shanghai complained over dinner about this type of minimalism that he is seeing among some of his younger employees. "They leave right at five o'clock even if there's still work to do! When we started the company, we would work until seven or eight or nine o'clock. But my younger employees just seem to want to work the minimum number of hours required to earn a salary."

The disease of settling

This form of minimalism has been rampant in the United States for far too long. In the old days, one would ask, "How's the product quality?" If the response was that the quality was conforming to specification, the conclusion was "Good enough." Today, if the Cpk is greater than 1.33, we declare "Good enough." This "good enough" mentality is a barrier to improvement; it's the most common symptom of minimalism in American industry. It is the disease of settling; and for many companies it has proven to be a fatal disease.

As Americans, we just seem content to settle: Meeting spec, good enough; within budget, good enough; on schedule, good enough. We just keep wasting all the gifts that God has given us. The result? In the words of the late Dr. W. Edwards Deming, we have become "an object of pity."

A glaring example of the disease of settling in American industry today is so-called "Six Sigma." A six sigma quality level is said to use only 50% of a specification; it's said to have a Process Capability Index (Cpk) of 2.0; it's said to result in defect rates of "only" about 3.4 parts per million.

Sounds great; but how many millions of centimeters of cable (mechanical and electrical) are on a 747 aircraft? Imagine that 3.4 centimeters per million are defective, frayed or subject to electrical shorts. Let's hope our aerospace industry isn't settling for the minimalism of Six Sigma!

In 1987, Ford Motor Company engaged Mazda to produce automatic transmissions for Ford's assembly plants. So, Mazda started to produce Ford transmissions to Ford designs for Ford automobiles. In the well-documented Batavia Study, investigators found that the Mazda transmissions never used more than 27% of the total tolerance at any level of the design – part, component, sub-assembly, final assembly, etc. Do the math; the first Ford transmissions Mazda ever made came in with a Cpk of about 3.7. That's greater than eleven sigma capability – and here we are settling for so-called six sigma.

Wheeler and Chambers cited an example of "continual improvement" (the opposite of settling) at Tokai Rika Company, a manufacturer of lighter sockets in Japan. In their text, Understanding Statistical Process Control, they presented an extensive summary of charts and data maintained by Tokai Rika from August 1980 to October 1981. The authors reported the following levels of product and process quality:

1. The process output was centered on the nominal of the design specification, using only 20 percent of the tolerance.
2. During the period represented by the data, Tokai Rika produced 2,906,000 parts without a single defect.

Here we are in the 21st century, getting all excited about six sigma (though often settling for Cpk's of 1.33, or merely four sigma). Almost forty years ago, a little lighter socket manufacturing plant in Japan was maintaining fifteen sigma capability! A six sigma process is said to produce about 3.4 parts per million defective. 37 years ago, a little lighter socket manufacturer produced zero parts defective out of close to three million parts produced.

Our quota has been filled.

Our quota of minimalists has been filled. It's time to overcome the malaise and mediocrity that characterize too many U.S. organizations. Back in the 1980's (and even before that) Mazda and Tokai Rika and Toyota and Ford and other successful companies tried hard to adopt Dr. Deming's principles. They accomplished dramatic improvements in quality, productivity and competitive position.

Let's go back to the future; let's study Deming's system of profound knowledge, adopt his management system and apply the powerful statistical methods he taught. Let's provide leadership to create healthy environments for work, for learning and for continuous improvement. Let's stop settling and let's start using all of our gifts to accomplish excellence.

Or, we can stick with six sigma and continue to settle for minimalism and mediocrity. As Deming was so fond of saying, "It's not necessary to change. Survival is not mandatory."