De-mystifying Six Sigma
What do “Process Improvement”, “Quality”, “Six Sigma” and all those other buzz words mean?

Have you ever gone to a business networking event and had a non-martial arts looking person introduce his/herself as a “Master Black Belt”? Have you given them a blank stare and innocently asked “you’re an expert in karate?” “Well, no,” they reply, “but I could disarm you with data…” So what do all these terms mean?

Many companies have taken a serious look at their operations and their customers and implemented initiatives to see how well they meet their customers’ requirements. These initiatives are typically called “quality programs” or “Six Sigma initiatives” or may be referred to as other terms.

So what do these types of programs do? Here are the key elements:

- They are a disciplined, data-driven approach and methodology for eliminating defects in any process -- from manufacturing to transactional and from product to service.
- What’s a defect? A defect is defined as anything outside of customer specifications. For example, if a customer wants a sheet of metal with a thickness between 950 mm and 1050 mm, any sheet above or below would be a defect or in this case scrap. From a service perspective, let’s say that the customer wants a service performed within 30 days (industry norm). Any delivery over 30 days would be considered a defect.
- The fundamental goal of a quality program is the implementation of a measurement-based strategy that focuses on process improvement. It’s applied through process improvement projects that follow a structured approach.

Six Sigma Methodology - It’s typically a structured 5 step process:

1. Define – What are the customer expectations of the particular process?
2. Measure - What is the frequency of defects?
3. Analyze - Why, when, and where do defects occur?
4. Improve - How can we fix the process?
5. Control - How can we make the process stay fixed?

Is all of this just for big companies? The answer is no. It can apply and benefit any company and doesn’t need to be sophisticated. It simply means: what do your customers want?; how are you delivering on that?; how can you fix any problems?; and how can you maintain the improvement?. Here’s an example:

A small promotional company customizes logos on shirts for businesses and sports teams (sewn in custom designs or attached applications).

- The customers want the orders to be delivered on the date the promotional company has committed to (customer requirement – on time delivery). It’s ok if the orders are delivered early but not if they go over the committed date (customer defect).
- The company had been receiving some complaints regarding delivery so they started comparing actual delivery dates to committed dates (measuring defects).
- Once they collected the data and determined there was a problem, they looked at all the potential reasons for the delays (analyze). By looking at the data they realized that all the missed orders were for the custom application.
- They then looked at their staffing and found they had not been scheduling the correct number of people for custom versus attached applications based on the volume. They then changed how they allocated their staff (improve).
- To ensure the problem didn’t happen again, they continued to measure actual versus committed delivery dates (control).
Now back to my opening comment, for those of you who still want more technical definitions of some of the jargon, here is a brief summary:

**What is Six Sigma?**
1. It’s a Measure of Quality that nears perfection. To achieve Six Sigma, a process must not produce more than 3.4 defects per million opportunities. However, it depends on the industry as to whether a company would strive to reach Six Sigma or a lower number.
2. It’s a Process For Continuous Improvement (as defined above in the 5 step process).

**What is a Master Black Belt?**
Typical Six Sigma roles in larger companies are: Champions (Senior Leaders), Quality Leader, Master Black Belt (MBB), Black Belt (BB), and Green Belt (GB). Typically Quality Leaders, MBB’s and BB’s are full time quality roles with formal training and certification processes. These people train, implement and manage quality improvement projects. Green Belts are usually employees in their regular jobs who have been trained in Six Sigma and are working on quality improvement projects within their functional area.

Now you’re armed when you hear the buzz words! Also, to reiterate, the concepts just don’t need to be for big companies. They can be applied to companies of all sizes and can realize the same benefits: Higher Net Income, Simpler Processes, More Productive Employees, True Focus on What the Customer Wants and Improved Employee Satisfaction. They are a recipe for success.