Understanding the IMPACT of Six-Sigma?
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Six-Sigma has been defined as an aggressive method for breakthrough (problem solving) improvement in speed, quality and cost. When properly implemented, Six-Sigma should focus on bottom line results, not training. Instead of measuring errors or defects in percentages, you measure them in parts per million or defects per million (PPM/DPM).

Our experience has been that most processes have error rates of 10/20/30% (100,000 - 300,000 PPM/DPM – 2/3 Sigma). When the economy turns down or sales heats up, the costs of fixing these defects (please see the observation titled, "Every Company Has Two Factories") can, and normally does put a strangle hold on the company.

Over time, these processes can and usually improve (using focused, team problem solving) to an error rate of around 3% (30,000 PPM/DPM – 3.5 Sigma), but it's slow, normally expensive, and takes a committed investment in time and effort. Most companies can be profitable at this level of performance so most companies fail to improve any further. This failure to continue to improve leaves you vulnerable to the competitors who are!

A simplified approach:

1. **A Six-Sigma improvement effort does not need to be expensive!**
2. **A Six-Sigma level of performance may not even be necessary or cost effective for your company!**

Let me explain: most companies spend $15,000 - $40,000 to train a "black belt" in all of the exotic statistical tools

necessary to solve all of the possible problems in a manufacturing or service company. But to improve your performance from 3 Sigma (30,000 PPM/DPM) to 5 Sigma (300 PPM/DPM), you really don't ever need all of the exotic statistical tools; you only really need to follow a basic problem solving method, like PDCA (plan – do – check – act). Have you ever noticed that to maximize your results in any endeavor you don't usually need to know everything (80/20), just the few essential? The same is absolutely true for a Six-Sigma improvement effort. With the tools that are provided in a basic problem method (pareto, check sheets, cause and effect, and pre-control charts) most companies can easily and have routinely found ways to save major dollars and dramatically impact the bottom line by investing in solving the problems.

Think about it, if it costs $10 to correct just one error, then going from 30,000 PPM/DPM to 300 PPM/DPM will prevent 29,700 errors and save $297,000. On the other hand, there are additional costs associated with continuing to correct an error: lost productivity, downstream costs, lost sales…(remember the "Rule of 10's"). In reality, a typical defect or error can cost $50 to $100 or more to correct when you include all of the related costs. Talk about a shrinking bottom line.

If you and your company haven't mastered a "Basic Problem Solving Method" what makes you think you will be able to master the Six-Sigma Method? You and your people should earn the right to utilize advanced problem solving methods like Six-Sigma. All the money necessary to enhance the bottom line of you company is already available; you're just spending it on the wrong stuff, like error correction.