

Six Sigma: Avoiding the Seven Deadly Sins

An Interview with James Zimmerman, Kepner-Tregoe, Inc.

by Noel Wilson, ASQ staff writer

As a partner and senior consultant with Kepner-Tregoe, Inc., a management consulting firm that works with manufacturing and service organizations, James Zimmerman has seen too many Six Sigma implementations fall short of achieving their potential. He observes, "Organizations see others having tons of success with Six Sigma, so they pick it up with high expectations and then are disappointed by their own results."

Examining what these organizations have in common, Zimmerman has identified seven reasons that help explain why Six Sigma programs underperform. In a presentation at the ASQ 2005 Six Sigma Conference, he shared those reasons, also exposing key warning signs and offering assessment questions organizations may use to ensure that they deal with the full complexity of Six Sigma. In an interview with the Six Sigma Forum before the conference, he offered a preview of what he refers to as the "seven deadly sins" of Six Sigma.

Understanding Six Sigma's Seven Deadly Sins

Zimmerman cautions against approaching the "seven deadly sins" as a list of distinct items that can be addressed one by one. They are interrelated and thus affect each other. The good news is that getting one of them right increases the chances of success with the others. Conversely, a mistake with one will probably trigger the others.

The seven specific implementation mistakes all fall into several broader categories:

- **A weak link between Six Sigma and overall organizational strategy.** "This can mean operationally implementing something that is strategically silly," Zimmerman explains, "or setting goals that are just too difficult for the organization at the time." Towards establishing a strategically sound direction for Six Sigma, organizations should concentrate on two objectives that Zimmerman considers crucial to success: clear linkages with organizational strategy for about five years into the future, and clear linkages with external customer needs.

- **Selecting the wrong projects.** Too often, Zimmerman states, project owners select and structure their own projects, pursuing improvements that have limited organizational impact or that have Black Belt certification as the primary goal. He recalls learning of a project in a medical products company to improve the yield of a product manufactured only two days each year. Such efforts to improve low-margin, low-volume products, he points out, place the focus on the internal customer instead of the external customer. The end result amounts to pennies in the grand scheme of the organization's financial performance.
- **Inadequate performance management.** When a Six Sigma DMAIC (define, measure, analyze, improve, control) project succeeds, Zimmerman says, the improvement team tends to receive the recognition; those who conduct the work affected by the project and contribute to the results are forgotten. "Not only are they ignored," he adds, "but even worse, the changes they're expected to make aren't always conducive to their daily work."

According to Zimmerman, a "feedback disconnect" exists within many Six Sigma organizations' performance management systems. The systems should be incenting participation in Six Sigma, but often the reverse happens. As an example, he cites a project by one of his clients in the semiconductor industry. In an attempt to improve workplace safety, the organization wanted to introduce a measure encouraging staff to report unsafe behaviors of their coworkers. Admitting that the idea has the potential to produce dramatic improvements, Zimmerman notes that it could also fail miserably unless implemented in a thoughtful way.

In fact, Zimmerman judges that all of the "deadly sins" he discusses might be said to stem from "good ideas not thought through." Just as a belief in automatic and instantaneous results can prompt a hastily planned initiative, the influence of preconceived notions about Six Sigma can prevent organizations from using it effectively.

For instance, Zimmerman comments on the slow acceptance of Six Sigma outside of manufacturing: "Part of the Six Sigma baggage is that it's viewed as a traditional manufacturing tool, but some of my clients doing their best work are having their biggest wins on the service side." His information technology clients, in particular, have only recently begun to see the need for continuous improvement. Having sailed through the 90s with plenty of capital and no down cycles, they have suddenly awakened to the fact that Six Sigma does pertain to them.

Adhering too closely to conventional Six Sigma wisdom can also cause organizations to over-apply the methodology, thus prolonging their results. Zimmerman estimates that only a small percentage, perhaps as low as 5%, of

Six Sigma applications actually require following every single step and using every single tool. “Judicious application of the right tools would save time and lead more quickly to the results that organizations are expecting,” he counsels. The central lesson is, again, to think through the implementation, using the tools that are required to accomplish the mission.

Taking Corrective Action

The purpose of Zimmerman’s conference presentation is to identify common implementation mistakes while also suggesting approaches for correcting them. “Generally, when you find that you’re running into these seven deadly sins, it doesn’t take a lot of effort to get it right,” he says. Because the training has already been done and teams are already deployed, corrective action usually consists of making sure all of the current separate activities are tied together and tied strategically to the organization.

Arguing that overall success has less to do with the “skills and gumption” of Black Belts and Green Belts than most would suspect, Zimmerman emphasizes the responsibility of management to keep the strategic focus of an implementation: “It’s easy for leaders to whip up the Six Sigma engine and set it into motion. The real test, however, is whether they provide the structure and ongoing support necessary for success.”

Zimmerman calls project selection and performance management “the two mastheads” for that structure and support. He further points out that from the perspective of the Black Belt or other Six Sigma worker who keeps running into obstacles presented by an immediate boss, these areas are also the “scariest.” How their behaviors are rewarded and encouraged will ultimately determine the progress of the initiative. Zimmerman says, “If leaders tie the right projects to a performance system that encourages the right behavior over the long haul, much of the rest will take care of itself.”

For Zimmerman, Six Sigma has already shown itself to be more robust than past “flavor of the month” initiatives like quality circles and participative leadership. “When it’s done right, when organizations take a holistic view,” he asserts, “there’s much more value to be reaped. It can pull billions of dollars in savings.” The key to achieving that full value lies in remembering the leadership work to be done between initial project success and sustained results.

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