

# Six Sigma: Quality's Evolution?

The differences between Six Sigma and TQM run deep.

In my February 2001 column, I wrote that Six Sigma differs from total quality management in many ways. Many readers wrote to disagree with particular points I made in that column. I grant that there's a lot of overlap, and I agree that well-implemented TQM programs can look a lot like well-implemented Six Sigma initiatives. Remember, the company that pioneered Six Sigma (Motorola) also won the granddaddy of TQM prizes, the Malcolm Baldrige National Quality Award.

Nevertheless, I still insist that Six Sigma is more than just another variation of TQM. One primary difference is in the internal organizational infrastructure. Six Sigma's internal organization is nothing

short of revolutionary. Forget the cutesy "belt" nomenclature for a moment and consider that there's never been anything like the new positions created

by Six Sigma: full-time, but temporary, change agents making up about 1 percent of the organization's workforce. (Taken as a percentage of the professional staff, it's even larger.) These people represent organizational slack dedicated not to producing routine work, but to producing *change*. Their performance is judged by their innovation, which takes the form of tangible improvements that benefit customers, shareholders or employees.

I've been surprised by many quality professionals' negative responses to these new upstarts. But after thinking about it, I realize that I shouldn't have been surprised at all. While quality professionals have preached the gospel of change for decades, they've always been the drivers of the change. With Six Sigma, the quality department is often on the receiving end of change; Six Sigma deployments are often spearheaded by people outside of the quality department and usually involve people who are not members of the quality priesthood.



Six Sigma vs. Quality	
Quality	Six Sigma
A functional specialty within the organization	An infrastructure of dedicated change agents. Focuses on cross-functional value delivery streams rather than functional division of labor.
Focuses on quality	Focuses on strategic goals and applies them to cost, schedule and other key business metrics
Is done because "quality is good"	Is done because it creates a tangible benefit for a major stakeholder group (customers, shareholders, or employees)
Loosely monitors progress toward goals	Ensures that the investment produces the expected return
People are engaged in routine duties (planning, improvement and control). Emphasizes problem solving	"Slack" resources are created to change key business processes and the organization itself. Emphasizes breakthrough rates of improvement (e.g., 10X improvement every two years)
Focuses on standard performance (e.g., meeting requirements, ISO 9000)	Focuses on world-class performance (e.g., 3.4 PPM error rate)
Quality is a permanent, full-time job. Career path is in the quality profession.	Six Sigma job is temporary. Six Sigma is a stepping-stone; career path leads elsewhere.
Provides a vast set of tools and techniques with no clear framework for using them effectively	Provides a selected subset of tools and techniques and a clearly defined framework for using them to achieve results (DMAIC)
Goals are developed by the quality department based on quality criteria and the assumption that what's good for quality is good for the organization.	Goals flow down from customers and senior leadership's strategic objectives. Goals and metrics are reviewed at the enterprise level to assure that local suboptimization does not occur.
Developed by technical personnel	Developed by CEOs
Focuses on long-term results. Expected payoff is not well-defined.	Six Sigma looks for a mix of short-term and long-term results, as dictated by business demands.

Let's look at an example: ASQ Certified Quality Engineers vs. Six Sigma Black Belts. A focus on concrete, tangible results is one of the key differences between BBs and CQEs, but what's the root cause of these differences? The answer, I believe, is the fundamental difference between Six Sigma and other quality initiatives. Six Sigma is not a "quality initiative" at all. Understanding the difference between Six Sigma and "quality" is key to understanding that Six Sigma marks the end of quality as we know it.

If Six Sigma is the next stage in quality's evolution, people in the quality profession might want to stop bashing it and take a more long-term view. CQEs who are turned down as BB candidates might want

to ask themselves what new knowledge, skills, abilities and personal attributes they need to become successful BBs. Many CQEs continue to act as though barriers existed long after they've disappeared. Some don't appreciate the need to quantify their results in bottom-line terms. Understand that improving quality isn't an end in itself, but a means to an end.

### About the author

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