

The Revolution in Manufacturing Quality – What can we learn? Presented by Larry Schuiski

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January 30, 2003

New quality-improvement programs are revolutionizing the way companies operate today. In addition to improving quality, these programs help cut costs, increase productivity and improve customer satisfaction, Larry Schuiski, WSA Board Member and CEO of Agilean, told a packed audience at the January, initial meeting of the WSA Quality Assurance SIG.

"There is a revolution going on out there with the way businesses are operating today, and if you are not involved you may never catch up," Schuiski said. The revolution has to do with new management processes that are changing how organizations look at the flow of work through their businesses.

Schuiski's topic was "The revolution in manufacturing quality - what can we learn?" He presented an overview of the leading quality-improvement programs that are being used in business today. These included: Total Quality Management, Six Sigma, Theory of Constraints and the Lean manufacturing process; all of which were pioneered in the manufacturing field by industry leaders Motorola, General Electric and Toyota.

Today, organizations across all industries, including Dell, Wal-Mart, Southwest Airlines and Microsoft, are embracing these management programs as more than just a passing trend.

"The crossover to software development firms applying these quality improvement programs is just beginning," Schuiski said. "Companies adapting these programs are seeing improvements in their operations, bottom lines and customer satisfaction. The challenge for quality assurance managers is to become aware of the new programs and to quickly begin applying the management processes that work best for their needs and organization."

Most managers are familiar with the concept of Total Quality Management, where quality- improvement programs are managed top-down to solve problems, Schuiski told the audience.

"The current fad in business today is Six Sigma," he said. "Six Sigma operates from a bottom-up approach. In Six Sigma companies look for problems and then define, measure, analyze, improve and control defects. Teams work the problem backwards, setting quality production standards with a goal of achieving 99.997 percent accuracy as measured against a perfect model, Schuiski explained. The advantage of this process is quality improvement multiplies as variations and defects are removed from every product, process and transaction and consistent, high quality, items are produced, he said.

In response to higher customer demands and expectations, some companies are moving from a mass production focus, to a "market of one" approach, Schuiski noted. This approach produces customized items for individuals upon demand.

Like the "market of one" approach, the Theory of Constraints system is based on the premise of "Why produce something if it is not needed?" This system uses "just in time" management practices and works to eliminate bottlenecks, so operations flow as quickly as possible. Additional benefits of this system are the removal of excess inventory and movements, along with operating expenses being reduced, he said.

The Lean management program places an emphasis on listening and responding to what the customer values most. "Skilled employees, working as a team, are engaged in constantly pursuing perfection,"

Schuiski said. "Employees are recognized for making improvements, suggestions and taking ownership to eliminate problems as they occur."

Companies applying these management programs are achieving improvements in their overall quality year after year. "It therefore becomes difficult for the competition to catch up, and the playing field becomes tilted in their favor," Schuiski said.

"It's important to get started now," Schuiski advised attendees. "The process to implement these programs takes a while and organizations need to be prepared for a journey, but it's important to start. If you don't, your competitors will, and you will never catch up."