

**Quality is Everything, and Everything is Quality -
Ten Steps To Implementing Six Sigma Quality
By: Michael J. Stickler**

It's easy to talk about quality. The growing barrage of articles, lectures, even TV shows preaching Six Sigma Quality is proof of that.

But improving quality is much harder to do. And that can be readily seen in the entropy that plagues quality improvement efforts at some of the best-intentioned, most-committed companies.

As one quality program leader at a Midwestern manufacturing company told us, "Achieving total quality is like battling a Hydra. Each time you get to the root of one problem, you find at least two more you didn't know about waiting to take its place."

That's why the commitment to Six Sigma Quality requires a commitment to a continuous improvement effort. You can't set up a calendar, pick a date in a year or 18 months, and say, "That's the day we'll be there. That's the day we'll complete our quality program, and get on to the next thing."

How do you get beyond talking Six Sigma Quality to begin doing it? There are 10 steps - actually commitments - that you must make to implement a successful Six Sigma Quality program.

Step 1: Executive Leadership

Too many companies are over-managed and under-led. Six Sigma Quality is not a program that can be directed by collecting reports, taking them upstairs where, in isolation, they can be number-crunched, cost-justified, and pronounced upon in traditional management style. Six Sigma Quality management requires a paradigm shift.

Leadership begins with top management education, which enables top managers to speak the language of Six Sigma Quality, to understand the cost of poor quality, and to become active in implementing the program of continuous improvement.

Top management must develop the vision - a mental image of the desirable, achievable future state - and set the missions, relating specific tasks, timeframes and teams to roles in achieving the vision.

The vision and missions should be set forth in formal, written statements, and these should be completed quickly -in no more than a week. If the process takes more time than that (and some management teams have taken a year or more to write these statements), you should recognize the effort for what it is - a delaying tactic.

Once the vision and missions are done, top management must take an active role in mobilizing the organization, letting everyone know what is expected. Management must also set the criteria for measuring progress through competitive analysis and benchmarking as well surveys of customer satisfaction.

Step 2: Education and Training

The best Six Sigma Quality education program includes a variety of education and training offerings that are matched to the appropriate levels of the company, from senior management to new people on the production line, as well as the people doing the administrative processes.

The first stage of education must be for Top Management/Senior Level Owners/Sponsors, and it is best accomplished through a two- or three-day overview course. The objective of the course should be to give managers a working overview and establish in them a comfort level with the leadership role they must assume.

The second stage of education is for Operations Management/Champions down to first - line supervisors and support staff. The most effective way to educate operating management is through in-house education in at least a two-three day format.

The third stage of the education is the “Black Belt” education/training. This education/training effort is to develop “Expert” problem solvers using the Six Sigma Quality methods.

The fourth stage of the education is the “Green Belt” education/training. This education/training develops the necessary skill set to support the “Black Belts”.

The fifth stage of education must extend the vision to include everyone in the company. This must also be done in-house, and it should employ a number of techniques: detail "how to" courses to apply total quality concepts to specific jobs; and continuing education to encourage refinement of skills leading to certification from the various quality professional societies.

The education and training program must be planned, developed and invested in as an ongoing, permanent program - not as a one-shot activity that can start and end in a matter of days and weeks. Consider, for example, that Motorola annually spends approximately 1.5 percent of gross sales on Six Sigma education and training. GE spends even more. Committing to continuous quality improvement means committing to continuous education. The bottom line is this, the more people that understand where your trying to go the more likely you are to get there.

Step 3: Organize for Six Sigma Quality Improvement

Since top management cannot always lead the day-to-day effort required to reach Six Sigma Quality, central intelligence for planning and implementing the program must be vested in a Six Sigma Quality leader.

The person selected should be someone from within the company who has a good working knowledge of it, its products and services. He or she should also have some experience with all functional areas of the business - planning, production, engineering, materials, information systems, finance and sales -since the Six Sigma Quality effort will impact every area of the business.

Technical knowledge of the business is not the most important consideration for a Six Sigma Quality leader. Rarely does a Six Sigma Quality program fail for lack of technical expertise. Rather, emphasis must be placed on choosing a good leader - an individual who has a track record for getting things done through people. A Real People Person!

A steering committee should also be formed to oversee the work of the Six Sigma Quality leader and help with planning. This steering committee should meet with the Six Sigma Quality leader monthly to monitor progress, to review benchmarks, and to clear obstacles that threaten to block progress with the program.

Outside guidance from an industry consultant is also advisable, so that an experienced different set of eyes can be brought to bear on the program and offer insight, alternative approaches and discipline.

All three – Six Sigma Quality leader, steering committee and the outside consultant - should report to top management the company president, general manager or, at the very least, a member of the executive team. Together they oversee the departmental task forces, cross-functional teams and small group improvement activities (SGIAS) formed to advance day-to-day Six Sigma Quality improvement activities.

Step 4: Six Sigma Quality Assessment

Before beginning a Six Sigma Quality program, the company must assess where it stands today on Quality. A first question concerns what are your priorities for pilot areas? A thorough, systematic assessment process will produce a ranking of how well the company is employing each Quality. It will also rank the priorities. If you continue to list the tasks required to improve each area, you will emerge from the process, not only with knowledge of where your company is starting from, but a good start toward a written quality improvement plan.

Step 5: Establish Goals and Objectives

Objectives are general statements of where you want to be at specific points in the improvement process. Goals are quantifiable measures of the same. In a structure that parallels the assessment, identify the objectives for improvement in each area. Try to establish quantifiable goals, not only for each area, but for the business as a whole. Some other areas to include are considerations of your market standing, cost of quality and quality culture.

Step 6: Develop a Six Sigma Quality Improvement Plan

As you set down goals and objectives along with the elements and tasks required to achieve them, you will see your formal assessment process transforming into a quality improvement plan that will serve as a working document for the total quality program leader, the steering committee and senior management.

In addition to the assessment of total quality elements, the quality improvement plan should include sections on: education, training, quality improvement expectations, quality planning procedures, general policies and procedures, and performance measurements.

Step 7: Performance Measurement

Measuring and communicating improvement is essential to nurturing the growth of commitment to - and success of - the Six Sigma Quality program. Performance measurement is the management process for seeing that the improvement plan is working and that goals and objectives are being reached.

Performance measurement can be applied to many levels of the business - daily operations, product lines, specific business units, pilot projects, and more. Six Sigma Quality performance measurements include: customer satisfaction, number of active improvement teams, number of team meetings, number of suggestions implemented, number or percent of capable processes, number or percent of certified suppliers, first pass yield, warranty costs, cost of poor quality, number of engineering changes, defects per million opportunities and Sigma level.

There are some things that can't be measured, like the value of a delighted customer or an empowered employee. Be attentive to feedback and consider these 'soft' issues in your performance measurement process.

Step 8: Set up Pilot Projects

Pilot projects permit careful analysis and management of new activities before company-wide changes are introduced.

The pilot can be a carefully planned "tryout" of Six Sigma Quality. The objective is to test the new activity under controlled operating conditions to make sure it works as expected.

Another successful pilot project is to take a single product line that can stand alone and implement Six Sigma Quality in this "mini-factory." This pilot allows you to work out the bugs before affecting all production operations at the same time it presents a model of how the new procedures work and the accomplishments to be gained from their use.

Once the pilot or mini-project is secure, it can be shared with the remainder of the business. Participants in the pilot can be temporarily or permanently transferred to other departments to help speed the expansion of total quality practices and successes.

Step 9: Standardization and Documentation

All along, your Six Sigma Quality Improvement Plan must be refined and revised to capture the tasks, procedures and methods that yield success.

Eventually, improvement targets and tasks will turn into the proven way things are done - standardized procedures that, when documented, will evolve into your company's Six Sigma Quality manual.

Step 10: Company-Wide Transition

As Six Sigma Quality is mastered and standardized, it must be internalized and made part of normal daily procedures and expectations - the way you do business. And, as we said at the beginning, you can't let up. Success depends on repeating the improvement process over and over - person by person, product by product, process by process - until it has delivered results in every area of the business.

Six Final Tips

I want to leave you with six tips for a successful Six Sigma Quality program. Six Sigma Quality improvement is not a quick fix. Computers and software won't do it. Better equipment won't do it. Only people can do it and the mobilization of organizations always takes time. However, you can maximize your advancement through the ten steps to total quality if you heed the following tips: .

- 1. Provide a clear understanding of your Six Sigma Quality objectives to everyone.**
- 2. Communicate results and activities frequently.**
- 3. Make sure everyone understands that total quality is a high management priority.**
- 4. Involve everyone in the program.**
- 5. Measure performance and progress frequently.**
- 6. Continue implementing new standards and new ways for achieving quality in your business.**

Now Some Tough Questions

Does your company have a vision of Six Sigma Quality? Is your vision grounded, not only on your desire to improve, but on a solid understanding of how you are perceived by customers? Are you ready to reinforce that vision with education and training, planning and measuring, and continual communication feedback and support?

Get started!