QUALITY CLASSIC

Crosby's 14 Steps To Improvement

by Philip B. Crosby

he most difficult lesson for the quality crusader to learn is that real improvement just plain takes a while to accomplish. The urgency of the need, the obviousness of the cause and the clarity of the solution have little to do with getting things straightened out.

That is why government programs often fail and are scrapped when a new administration takes over. The disappointment and disillusionment of the previous administrator are all too obvious. The administrator blames a lack of funds, cooperation, timing

In 50 Words Or Less

- Crosby's 14-step approach for quality managers to get their organizations on track focuses on long-term employee participation, not short-term motivational tactics.
- This article is adapted from chapter eight of Quality Is Free: The Art of Making Quality Certain, originally published in 1979.

or whatever for the failure. Yet no matter what the program was, or however well it was directed, its potential for success hinged on events entirely separate from the executive's efforts.

Quality improvement programs have similar problems. Because quality improvement sounds like such a great idea, and because it is usually so necessary, managers often think merely announcing its conception is the signal for arranging a victory dinner.

I have yet to attend a quality meeting where someone didn't comment to me that they had been unable to really reach their management or get the people motivated to put quality improvement over the top. They claim they have taken the actions any well-oriented professional would expect, and yet they are disappointed. Those colleagues who have faithfully implemented the 14step quality improvement program worry about an inevitable falloff in enthusiasm and search for new means of keeping the program on a high intensity level.

Each time I hear these things I am shocked. I am always surprised that they are surprised. Why should quality be different from the real world?

Basically, people are slow to change because they reject newness. The world is a complicated and unsettled place. Each individual treasures the few things he or she can depend upon. A company quality improvement effort must be well thought



out, and it must be implemented according to a plan, over a long period of time. It requires a culture change; it must become part of your lifestyle. And it requires that you never relax your attention. You have to stay at it continually.

You as a manager have an obligation to demand continual quality improvement from your operation, whether you are in the accounting business or a machine shop. You have an obligation to provide thoughtful and imaginative leadership. What you put out is what you get back.

People who have to put improvement programs in place at organizations always think others are not for it. This is entirely normal and reflects the natural shyness of the organization bird. We don't really like to get out front with too much unless we are absolutely certain it will be properly received. But my experience has been that, when properly explained, improvement efforts are always received correctly. It's the proper examination that takes some effort.

To get employees behind a quality movement, it is a good idea to move right into the basics of quality. Help them understand what quality means, emphasizing the absolutes of quality management:

- Quality means conformance, not elegance.
- There is no such thing as a quality problem.
- There is no such thing as the economics of quality; it is always cheaper to do the job right the first time.

- The only performance standard is zero defects.
- The only performance measurement is the cost of quality (COQ).

Explain the zero defects concept. Answer all questions, and keep it all simple and untechnical. Remind employees that quality is free.

They really want to believe, and they really want it to happen. But their life is one continual scene of people bringing them plans and schemes that will help them succeed, cut costs, fly to the moon and do a thousand other things. Like you, they know most things don't work like they're supposed to work.

The main task you have at this key moment is to show them this 14-step program has worked for other companies and it will work for yours, if they participate. But you also have to help them understand that although there will be instant improvement as soon as you start the effort, it will be a long while before it becomes permanent. It is hard and rewarding work. It will bring recognition to all of them.

As for yourself, remember the product you are selling, and your employees are buying, is quality improvement. The result of quality improvement is improved everything else, form sales to absenteeism. But it is a result. So don't tie in a bunch of marketing motivation activities, the blood bank, the savings bond drive or the annual barbeque. Keep quality improvement in the front of your mind each time a decision has to be made.

Step 1: Management Commitment

Action. Discuss the need for quality improvement with management, emphasisizing the need for defect prevention. Do not confuse "communication" with "motivation." The results of communication are real and long-lasting; the results of motivation are shallow and short-lived. Prepare a quality policy that states each individual is expected to "perform exactly like the requirement or cause the requirement to be officially changed to what we and the customer really need." Agree that quality improvement is a practical way to profit improvement.

Accomplishment. Helping management recognize it must be personally committed to participating in the program raises the level of visibility for quality and ensures everyone's cooperation so long as there is progress.

Step 2: Quality Improvement Team

Action. Bring together representatives of each department to form the quality improvement team. These should be people who can speak for their departments to commit operations to actions. Preferably, the department heads should participate—at least on the first go around. Orient the

team members as to the content and purpose of the program. Explain their roles—which are to cause the necessary actions to take place in their departments and the company.

Accomplishment. All the tools necessary to do the job are now together in one team. It works well to appoint one of the members as the chair of the team for this phase.

Step 3: Quality Measurement

Action. It is necessary to determine the status of quality throughout the company. Quality measurements for each area of activity must be established where they don't exist and reviewed where they do. Record quality status to show where improvement is possible and where corrective action is necessary and to document actual improvement later.

Nonmanufacturing measurements, which are sometimes difficult to establish, are shown in Table 1.

There are innumerable ways to measure any procedure. The people doing the work will respond with delight to the opportunity to identify some specific measurements for their work. If a supervisor says her area is completely immeasurable, she can be helped by asking how she knows who is

> doing the best work, how she knows who to keep and who to replace.

Accomplishment. Formalizing the company measurement system strengthens the inspection and test functions and ensures proper measurement. Getting the paperwork and service operations involved sets the stage for effective defect prevention where it counts. Placing the results of measurement in highly visible charts establishes the foundation of the entire improvement program.

TABLE 1

Nonmanufacturing Quality Measurements

Accounting	Percentage of late reports	Computer input incorrect	Errors in specific reports as audited
Data processing	Keypunch cards thrown out for error	Computer downtime due to error	Rerun time
Engineering	Change orders due to error	Drafting errors found by checkers	Late releases
Finance	Billing errors (check accounts receivable overdues)	Payroll errors	Accounts payable deduction missed
Hotel front desk	Guests taken to unmade rooms	Reservations not honored	
Manufacturing engineering	Process change notices due to error	Tool rework to correct design	Methods improvement
Marketing	Contract errors	Order description errors	
Plant engineering	Time lost due to equipment failures	Callbacks on repairs	
Purchasing	Purchase order changes due to error	Late receipt of material	Rejections due to incomplete description



Step 4: Cost of Quality Evaluation

Action. Initial estimates are likely to be shaky (although low), and so it is necessary at this point to get more accurate figures. The comptroller's office must do this. They should be provided with detailed information on what constitutes COQ. COQ is not an absolute performance measurement; it is an indication of where corrective action will be profitable for a company. The higher the cost, the more corrective action that needs to be taken.

Accomplishment. Having the comptroller establish COQ removes any suspected bias from the calculation. More important, a measurement of quality management performance has been established in the company's system.

Step 5: Quality Awareness

Action. It is time now to share with employees the measurements of what nonquality is costing. This is done by training supervisors to orient employees and by providing visible evidence of the concern for quality improvement through communication material such as booklets, films and posters. Don't confuse this with some getmotivated-quick scheme. It is a sharing process and does not involve manipulating people. This is an important step. It may be the most important step of all. Service and administrative people should be included just like everybody else.

Accomplishment. The real benefit of communication is that it gets supervisors and employees in the habit of talking positively about quality. It aids the process of changing, or perhaps clarifying, existing attitudes toward quality. And it sets the basis for the corrective action and error cause removal steps.

Step 6: Corrective Action

Action. As people are encouraged to talk about their problems, opportunities for correction come to light, involving not just the defects found by inspection, audit or self-evaluation, but also less obvious problems—as seen by the working people themselves—that require attention. These problems must be brought to the supervision meetings at each level. Those that cannot be resolved are formally passed up to the next level of supervision for review at their regular meeting. If a specific functional area does not hold such meetings, the team should take action to establish them in that department.

Accomplishment. Individuals soon see the problems brought to light are being faced and resolved on a regular basis. The habit of identifying problems and correcting them is the beginning.

Step 7: Establish an Ad Hoc **Committee for the Zero Defects Program**

Action. Select three or four members of the team to investigate the zero defects concept and ways to implement the program. The quality manager must be clear, right from the start, that zero defects is not a motivation program. Its purpose is to communicate to all employees the literal meaning of the words "zero defects" and the thought that everyone should do things right the first time. This must be transmitted to every member of the team. In particular, the ad hoc group should seek ways to match the program to the company's personality.

Accomplishment. Improvement comes with each step of the overall program. By the time zero defects day is reached, as much as a year may have gone by and the initial improvement will be flattening out. At that point, the new commitment to a specific goal takes over, and the improvement begins. Setting up the ad hoc committee to study and prepare the implementation ensures the goals of the program will be firmly supported by the company's thought leaders.

Step 8: Supervisor Training

Action. Conduct a formal orientation with all levels of management prior to implementation of all the steps. All managers must understand each step well enough to explain it to their people. The proof of understanding is the ability to explain it.

Accomplishment. Eventually all supervisors will be tuned into the program and realize its value for themselves. Then they will concentrate their actions on the program.

Step 9: Zero Defects Day

Action. Establishment of zero defects as the performance standard of the company should be done in one day. That way, everyone understands it the same way. Supervisors should explain the program to their people and do something different in the facility so everyone will recognize it is a "new attitude" day.

Accomplishment. Making a day of the zero defects

commitment provides an emphasis and a memory that will be long lasting.

Step 10: Goal Setting

Action. During meetings with employees, each supervisor requests they establish the goals they would like to strive for. Usually, there should be 30-, 60- and 90-day goals. All should be specific and measurable.

Accomplishment. This phase helps people learn to think in terms of meeting goals and accomplishing specific tasks as a team.

Step 11: Error Cause Removal

Action. Ask individuals to describe any problem that keeps them from performing error free work on a simple, one-page form. This is not a suggestion system. All they have to list is the problem; the appropriate functional group (for example, industrial engineering) will develop the answer. It is important that any problems listed be acknowledged within 24 hours. Typical inputs might be:

- This tool is not long enough to work right with all the parts.
- The sales department makes too many errors on their order entry forms.
- We make a lot of changes in response to telephone calls, and many of them end up having to be done all over again.
- I don't have any place to put my pocketbook. Accomplishment. People now know their problems can be heard and answered. Once employees learn to trust this communication, the program can go on forever.

Step 12: Recognition

Action. Establish award programs to recognize those who meet their goals or perform outstanding acts. It is wise not to attach relative values to the identification of problems. Problems identified during the error cause removal stage should all be treated the same way because they are not suggestions. The prizes or awards should not be financial. Recognition is what is important.

Accomplishment. Genuine recognition of performance is something people really appreciate. They will continue to support the program whether or not they, as individuals, participate in the awards.

Step 13: Quality Councils

Action. Bring the quality professionals and team chairpersons together regularly to communicate with each other and determine actions necessary to upgrade and improve the solid quality program being installed.

Accomplishment. These councils are the best source of information on the status of programs and ideas for action. They also bring the professionals together on a regular basis.

Step 14: Do It Over Again

Action. The typical program takes a year to 18 months. By that time, turnover and changing situations will have wiped out most of the education effort. Therefore, it is necessary to set up a new team of representatives and begin again. For instance, mark zero defects day as an anniversary. Or give a special lunch for all employees. The point is that the program is never over.

Accomplishment. Repetition makes the program perpetual and, thus, "part of the woodwork." If quality isn't ingrained in the organization, it will never happen.

PHILIP B. CROSBY was considered one of the foremost quality experts of the 20th century. In 1979, after several years in quality, he founded Philip Crosby Associates, a quality management consulting firm in Winter Park, FL, which still exists today. By the time of his death in 2001, he had authored several books, including Philip Crosby's Reflections on Quality: 295 Inspirations From the World's Foremost Quality Guru and Quality Without Tears: The Art of Hassle-Free Management.

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