

Notes and quotes from Philip B. Crosby's book  
**QUALITY IS FREE**  
(Compiled by D. H. Groberg)

**SUMMARY:** This is a book about making quality certain. Crosby contends that doing the job right the first time is always cheaper than reworking, scraping, servicing defective products, etc. And because the cost of reworking, scraping, or servicing them is so high (up to 25% of gross revenues is not unusual) by installing systems that insure that things are done right the first time, the cost of quality is zero—it is free. In fact it pays great dividends.

"Quality management is a systematic way of guaranteeing that organized activities happen the way they are planned" (p. 19). It must start at the top. Crosby gives a 14 step program to implement quality improvements. He also gives case studies, histories, and a quality maturity grid and self-evaluations to be used to determine where people and organizations are presently.

#### PART I: THE UNDERSTANDING

Quality is free. What costs money is unquality—all of the activities resulting from not doing the job right the first time.

#### CHAPTER 1: MAKING QUALITY CERTAIN

This means "Getting people to do better all the worthwhile things they ought to be doing anyway" (p. 3). This is done by explaining quality in terms that it cannot be misunderstood. Crosby tells of this experience at ITT in getting top management involved, explaining what quality is to them so that they enthusiastically support it, getting into a position to influence it. His goal was to get absolutely correct requirements established that would be absolutely conformed to the first time. It describes it as a "cultural revolution."

One of his greatest challenges was to overcome what people "already knew" about quality. (That it means "goodness" or that it is "unmeasurable" or "impossible." He defines quality as "conformance to requirements." And people perform to the standards of their leaders. By working on "doing things right the first time" ITT saved \$30 million in 1968, \$157 million in 1971, \$328 million in 1973, and \$530 million in 1976. Crosby says that most companies will not be able to apply the principles of quality because their management will not be patient enough to see them through.

#### CHAPTER 2: "QUALITY MAY NOT BE WHAT YOU THINK IT IS."

Crosby says that quality is more like ballet than hockey--planned out, rehearsed, etc. He says that it requires unblinking dedication, patience, and time. Yet "No other action a manager can take will generate improved operations, increased profits, and reduced costs so quickly with so little effort" (p. 14.). And quality is a people thing.

Quality is not goodness, luxury, or shininess, etc. (A Pinto as well as a Cadillac can conform to its requirements and thus be a quality car.)



Quality can be measured. It is the cost of nonconformance, or of doing things wrong. Organizations typically spend 15 to 20% [or more] of their gross income on expenses resulting from not doing things right the first time. By spending effectively on prevention and appraisal activities, these costs can be reduced to 2.5% of income. Measuring and charting improvements so all can see is very important. People like to see results.

There are no economics of quality. "Can't afford to make it right" doesn't make sense. Crosby insists that it is always cheaper to do things right the first time.

Quality problems are not always originated by the workers. "They contribute a lot less problems than their white collar brethren" (p. 16). However, the workers can only contribute a little towards preventing problems because the planing and creating is done elsewhere.

Finally, quality does not originate in the quality department [or committee]. Responsibility for quality rests with those people and departments who are directly involved. If an outside group corrects problems, the group causing them will not change.

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### CHAPTER 3: THE QUALITY MANAGEMENT MATURITY GRID

Here Crosby gives a family example: It is the most difficult of jobs. Those who succeed could be just by chance. Three obstacles: 1. Members brought aboard without being evaluated, tested, etc. unknown quantities. 2. Stuck with who you get. Can't toss them out, exchange, etc. 3. Family managers not trained for the job. No methods of measuring except by own experience. So....folklore exists, and transfers to work: "If you have good in your heart, you will produce quality" (p. 23). "Changing mind sets [paradigm shifts] is the hardest of management jobs. It is also where the money and opportunity lie" (p. 24).

Crosby presents a Management Maturity Grid which can be used to pinpoint where an organization is in its quest for quality. It has five (5) stages in it:

1. Uncertainty: "We don't know why we have problems with quality."
2. Awakening: "Is it absolutely necessary to always have problems with quality?"
3. Enlightenment: "Through management commitment and quality improvement we are identifying and resolving our problems."
4. Wisdom: "Defect prevention is a routine part of our operation."
5. Certainty: "We know why we do not have problems with quality."



## THE QUALITY MANAGEMENT MATURITY GRID

QUALITY MANAGEMENT MATURITY GRID					
Rater _____			Unit _____		
Measurement Categories	Stage I: Uncertainty	Stage II: Awakening	Stage III: Enlightenment	Stage IV: Wisdom	Stage V: Certainty
Management understanding and attitude	No comprehension of quality as a management tool. Tend to blame quality department for "quality problems."	Recognizing that quality management may be of value but not willing to provide money or time to make it all happen.	While going through quality improvement program learn more about quality management; becoming supportive and helpful.	Participating. Understand absolutes of quality management. Recognize their personal role in continuing emphasis.	Consider quality management an essential part of company system.
Quality organization status	Quality is hidden in manufacturing or engineering departments. Inspection probably not part of organization. Emphasis on appraisal and sorting.	A stronger quality leader is appointed but main emphasis is still on appraisal and moving the product. Still part of manufacturing or other.	Quality department reports to top management, all appraisal is incorporated and manager has role in management of company.	Quality manager is an officer of company; effective status reporting and preventive action. Involved with consumer affairs and special assignments.	Quality manager on board of directors. Prevention is main concern. Quality is a thought leader.
Problem handling	Problems are fought as they occur; no resolution; inadequate definition; lots of yelling and accusations.	Teams are set up to attack major problems. Long-range solutions are not solicited.	Corrective action communication established. Problems are faced openly and resolved in an orderly way.	Problems are identified early in their development. All functions are open to suggestion and improvement.	Except in the most unusual cases, problems are prevented.
Cost of quality as % of sales	Reported: unknown Actual: 20%	Reported: 3% Actual: 18%	Reported: 8% Actual: 12%	Reported: 6.5% Actual: 8%	Reported: 2.5% Actual: 2.5%
Quality improvement actions	No organized activities. No understanding of such activities.	Trying obvious "motivational" short-range efforts.	Implementation of the 14-step program with thorough understanding and establishment of each step.	Continuing the 14-step program and starting Make Certain.	Quality improvement is a normal and continued activity.
Summation of company quality posture	"We don't know why we have problems with quality."	"Is it absolutely necessary to always have problems with quality?"	"Through management commitment and quality improvement we are identifying and resolving our problems."	"Defect prevention is a routine part of our operation."	"We know why we do not have problems with quality."

Each stage is describes by reference to management understanding and attitude, organizational status, problem handling, cost of quality, improvement actions, and summation posture (the one given above in quotes). Anyone looking at the grid can tell where their organization is.



## CHAPTER 4: MANAGEMENT UNDERSTANDING AND ATTITUDE

Crosby gives a case history of a quality control person helping a production supervisor gain increased understanding about quality. Some points that come out of the case history are: "Improvement itself is never the real difficulty. Once individuals recognize and agree on their position, it is never difficult to improve. The unfortunate part is that very few of us own up" (p.43). People usually think that their biggest problems are things someone else does [reactivity]. Awakening moves only when the true cost of not having quality is understood. Crosby says "I hate to keep talking about attitudes, but attitudes are really what it is all about" (p. 46).

A quality improvement team should represent every department and have the attitude, "we are all in this together." Efforts should be started as pilots in areas that are most receptive to new ideas.

## CHAPTER 5: QUALITY ORGANIZATIONAL STATUS

Crosby recommends that a Quality Committee operate as a committee, not as individual people. He recommends establishing a Quality Policy and he gives an example of one (p. 56-57). The essence is that it is the quality policy to "perform exactly like the requirements or cause the requirements to be officially changed to what we and our customers really need" (p. 57).

If something is easy to do and makes sense, but is always done, there has to be a reason for not doing it. "There is absolutely no reason for having errors or defects in any product or service" (p. 58).

Crosby lists and discusses some Quality Department Functions:

1. Product Acceptance. (Inspection and testing)
2. Supplier Quality. (Supplier quality engineering and purchased goods acceptance)
3. Quality Engineering. (Data analysis and status reporting, Corrective action, Planning, Qualification of products, process, and procedures, Audit, and Quality Education [education about quality].)
4. Quality Improvement. (14 step plan [presented later])
5. Consumer Affairs. (Prevention, Awareness, Correction)
6. Product Safety. ("People just want their rights until you try to trample them; Then they want revenge" {p. 71})

## CHAPTER 6: HANDLING PROBLEMS

"No person is so exposed as when that person starts to handle a problem" (p. 73). Place problems on the job, not on individuals. Over 85% of problems can be corrected at the first level of supervision; next 13% within two levels.

Crosby gives some specific case histories, questions, and quality improvement self-evaluations. He suggest that these could be used as educational tools. He points out that people don't work for money alone. (There are many things people won't do for money.) People also want a feeling of accomplishment, recognition, achievement, personal satisfaction, and security. [Some of these self-evaluations look useful.]



## CHAPTER 7: COST OF QUALITY

Quality is free, but no one is going to know it if there isn't some sort of agreed-on system for measuring it. What are the costs of:

1. Efforts to do work over (including clerical)
2. All scrap
3. Warranty (including handling of returns)
4. After service warranty
5. Complaint handling
6. Inspection and tests
7. other costs of error such as process change notices

(It is normal to obtain only one-third of the real costs the first time tried. However, the real costs are not as important as the awareness that they are significant and solvable.)

On the other side, (the Quality side) there are costs, too:

1. **Prevention Costs.** (Efforts to prevent defects, etc.)
2. **Appraisal Costs.** (Inspections, tests, etc.)
3. **Failure Costs.** (Costs associate with things that don't conform.)

## CHAPTER 8: QUALITY IMPROVEMENT PROGRAM

It takes a while to accomplish. [No quick fixes]. You have to lead people gently toward what they already know is right or they won't cooperate. People who put improvement programs in place think no one else is for it. But if properly explained, people always receive quality improvement programs well. Three things to help them to understand:

1. Quality means conformance, not elegance.
2. There is no such thing as a quality problem [referring to Quality Department].
3. There is no such thing as the economics of quality; it is always cheaper to do the job right the first time.
4. The only performance measurement is the cost of quality.
5. The only performance standard is Zero Defects.



Here Crosby gives fourteen (14) steps of a quality improvement program:

- Step 1. **Management Commitment** (Communication, not motivation)
- Step 2. **Quality Improvement Team** (Representatives from each department)
- Step 3. **Quality Measurement** (For each area of activity; chart and share info)
- Step 4. **Cost of Quality Evaluation** (By Comptroller's office--unbiased)
- Step 5. **Quality Awareness** (Sharing with employees--may be most important)
- Step 6. **Corrective Action** (Correct immediate problems)
- Step 7. **Establish an Ad Hoc Committee for the Zero Defects Program**
- Step 8. **Supervisor Training** (Formal training for all levels)
- Step 9. **Zero Defects Day** (Formal "start" of a new era)
- Step 10. **Goal Setting** (Employees/Departments set 30-, 60-, 90-day goals)
- Step 11. **Error Cause Removal** (Individuals describe problems--mgmt solves them)
- Step 12. **Recognition** (Award programs are established--recognition is the key)
- Step 13. **Quality Councils** (Upgrade and improve the efforts)
- Step 14. **Do it Over Again** (Begin again with a new team--keep it going)

These 14 steps are used to present the case studies later on in Part III: The Tools. This is the program that he claims always works if it is implemented correctly. [But what can fail if it is "implement" correctly? If it fails, then the blame can always be put on the "implementation".]

#### CHAPTER 9: MANAGEMENT STYLE

Because of changing times, management styles that have worked in the past won't work to get quality today. People won't just do what they are told to do. They want to participate. Crosby lists ten (10) items that managers can check themselves against:

1. **LISTENING:** [Very close to empathic listening concept. Good quotes here.]  
"You must concentrate on what is behind the words."  
"Most of us wait patiently for the speaker to finish so we can do our own talking."  
"Nothing is more important than true understanding, and nothing is harder to come by." (p. 125)
2. **COOPERATING:** You and team both need to be worthy of each other. Help things to happen, and protect people in the process.



3. **HELPING:** True help is truly unselfish, with no thought of return.
4. **TRANSMITTING:** Writing (short and straight), prepared speaking, conversation.
5. **CREATING:** You can learn to be creative. Expand, join, update.
6. **IMPLEMENTING:** Even more valuable than creating. Get the job done!
7. **LEARNING:** Never cease learning. You never know what you are going to need to know in the future. Read something about everything.
8. **LEADING:** Sometimes just stepping in front and saying "Follow me!" "Leading means stating objectives in a way that is precisely understood, ensuring the commitment of individuals to those objectives, defining the methods of measurement, and then providing the impetus to get things done" (p. 132).
9. **FOLLOWING:** "Good followers who want to expand their sphere of influence, get promoted and move into higher activities" (p. 133).
10. **PRETENDING:** Don't do it unless you're an actor.

## PART II: THE DOING

"The biggest problem managers face comes when they are actually expected to accomplish all the things they have been saying could be accomplished if only everybody would listen to them" (p. 137). (Crosby says he has never seen an unsuccessful quality improvement program that followed the 14 steps even vaguely.)

In these next two chapters, Crosby gives a case study of an organization implementing the 14 steps.

### CHAPTER 10: HISTORY OF THE PROJECT

Some thoughts from this chapter:

Don't just patch things up; prevent them from happening in the first place.

Zero Defects is the key to quality improvement. It is the attitude of defect prevention. To do what you said you were going to do when you came to work.

Very clear standards of performance must be set for people.

In our personal lives we don't expect nor accept defects: being shortchanged, nurses in hospitals to drop babies a certain percent of the time, etc.

Defects are caused by either lack of knowledge [or skill] or lack of attention. Lack of attention is a state of the mind, an attitude. Individuals must accept a personal standard of Zero Defects from the top on down.



## CHAPTER 11: THE PROGRAM

Here the actual implementation of the 14 steps are described in the case study. Some thoughts from them:

It is much less expensive to prevent errors than to rework, scrap, or service them.

Individual departments are held responsible for developing their own programs and causing them to occur.

### ZERO DEFECTS OR BUST!

We must learn to do these "get better" things in an organized manner.

Philosophy is what this program is all about. (But you have to pretend it's a technique)

Quality measurement is only effective when it is done in a manner that produces information that people can understand and use. (Charts, problem identification)

Agree on measurements; display measurements where everyone can see them.

Regular meetings must be held between management and employees.

Information must be communicated through posters, articles, special events, etc.

The most direct method of formally resolving problems is to establish four levels of constant activity:

- a. Hold daily meetings between area supervisor and a quality person to examine the problems detected.
- b. Hold weekly meetings between the production general supervision and senior quality management to attack problems that can't be solved at a lower level.
- c. Hold monthly or special meetings of general manager and staff to review unsolved problems.
- d. Task teams should consist of responsible members of each affected organization with one person appointed as chairperson.

In giving rewards and recognition, it is more important to concentrate on the dignity of the presentation than on what the awards are.

People need to meet regularly just to share their problems, feelings, and experiences.

Quality improvement programs never end. [The just look for more and more ways to improve things.]



### PART III: THE TOOLS

These next two chapters can be used to lead students as they develop an understanding of the logic and methods of the 14 step program.

#### CHAPTER 12: INSTRUCTOR'S GUIDE FOR HPA QUALITY IMPROVEMENT CASE HISTORY

This chapter details the logic of the case study of the 14 step quality improvement program. It gives some pointers in teaching quality to people. For example:

"Quality is not something you can attain through whipping and punishing those involved. You have to give them the message, let them participate, and not try to fool them" (p. 235-6).

Take advantage of the rush of improvement that will occur at the beginning and share it. This will help get you through the initial difficult and rough spots.

Keep track of any good suggestions so you can share them with future classes.

#### CHAPTER 13: MAKE CERTAIN

Crosby claims that this Make Certain program will get everyone's attention, and will get prevention suggestions from 90% of the people exposed to it. It is an instructor's guide for conducting Make Certain training and start an on-going examination of procedures and methods by the personnel involved towards defect prevention.

It has people state the biggest problems, ask how they might be prevented, discusses the idea of each person taking some action [proactivity], and has them state their ideas as recommendations to the improvement team. It helps people stop causing problems for themselves.

It suggests that people identify their customers (within and without the company), what their customers want from them, how they can measure their service to them, and how they can make certain that failures don't occur.