

BUILDING MANAGEMENT COMMITMENT TO A QUALITY MANAGEMENT STYLE

PRACTICE OBJECTIVE

If there is but one point to be taken from this manual, let it be the fact that QM implementation is impossible without top management commitment. The need for management commitment is no secret. While any reference on the subject will make this point, few management teams take this requirement at face value and actively pursue commitment. Many think allowing QM to happen is the extent of their obligation toward QM. As this section explains, saying "yes" to QM is only the beginning of management's responsibilities. However, we must offer a word of caution. Having management commitment does not guarantee QM success; it only improves the odds for successful implementation. The entire organization must eventually become committed to QM. This process focuses on management commitment.

PRACTICE PURPOSE

Management commitment is the single most important requirement for successful implementation of quality management. There is no precedent for successful quality improvement without the top manager and the management team leading the effort. Also essential is a cultural change led by top management. A common mistake in implementing QM is to emphasize the technical tools (statistics) at the expense of the cultural change required. From the most senior level down, managers need to drive the process and incorporate the philosophy of QM into their management styles. Managers must be prepared for an environmental change. Quality is the most important responsibility of management. They must set the tone for the entire organization by leading the implementation of QM. The ideal implementation model is top-down implementation: top management first, then middle management, then line management and, finally, employees. This waterfall effect has proven successful in many organizations.

WHAT IS COMMITMENT?

Commitment can take many forms. First and foremost, it is action-action that can be measured in time,

effort, and money. Commitment begins by putting quality at the top of every agenda. Looking at management's current calendars is a good measure of management's current commitment to quality. Quality must come before schedule and cost for true management commitment to QM. "How good?" must precede "How many?" and "How much?" Employees measure management's commitment by observing management's actions.

Management must sincerely believe that the organization can and must do better. This desire to excel needs to become the prevailing attitude in the organization. For such an attitude to be compelling it must come from the top of the organization. This attitude could eventually be expressed as an emotional commitment to the perfection of goods and services by everyone in the organization.

Commitment to satisfying end users may be another new priority for management. As mentioned in the appendix to Section 1 (1.A1), the end user must become king. This commitment also applies to the internal end users in the organization. Internal end user-supplier relationships must be established if they currently are not recognized. Satisfying all end users will be one of the main objectives of the organization. Top management must also lead this effort by personally maintaining close contact with end users. Knowledge of end users' needs and expectations (internal and external) is a prerequisite to satisfying them.

Management must also be committed to acquiring new skills and perspectives. The use of quantitative techniques must become second nature to management as well as to the rest of the work force. Management must learn and use the language of statistics. Statistical analysis, as opposed to opinion and "gut feelings," must become the basis for decision-making. This quantitatively based approach to management will be one of the long-term effects of QM. Management must become committed to applying continuous process improvement techniques to all processes in the organization, including management processes. The focus of problem-solving will change from people to processes.

All too often the reaction to any problem is the need to place blame. This part of human nature must be overcome by stressing the need to find and fix root causes of problems. Again, management must lead by example. Ideally, QM should only proceed through the rest of the organization after such a management commitment is obtained.

Management will need to become more active in recognizing success. Implementing QM will be difficult for everyone in the organization. By looking for every opportunity to thank people for their contributions, management will help sustain the momentum required for the long haul. Recognition should be given in the work area, with management traveling to the employees' work site instead of bringing employees to management's office.

Management's commitment cannot be for the short run. The implementation of QM is a long-term effort. Management will need to sustain its interest until QM becomes the way of life in the organization. This change can take a minimum of five to eight years to start and may take decades to complete. Such a long-term commitment will be difficult to maintain because management will probably change during this period of time. New managers will replace those moving on and must embrace the cause of QM. This requirement for long-term commitment to QM must be obtained from the new managers as soon as possible after they enter the organization. A change in top managers causes many organizations to fail in their efforts to implement QM. Trying to implement QM at the bottom of the organiza-

tion before securing management commitment eventually results in frustration.

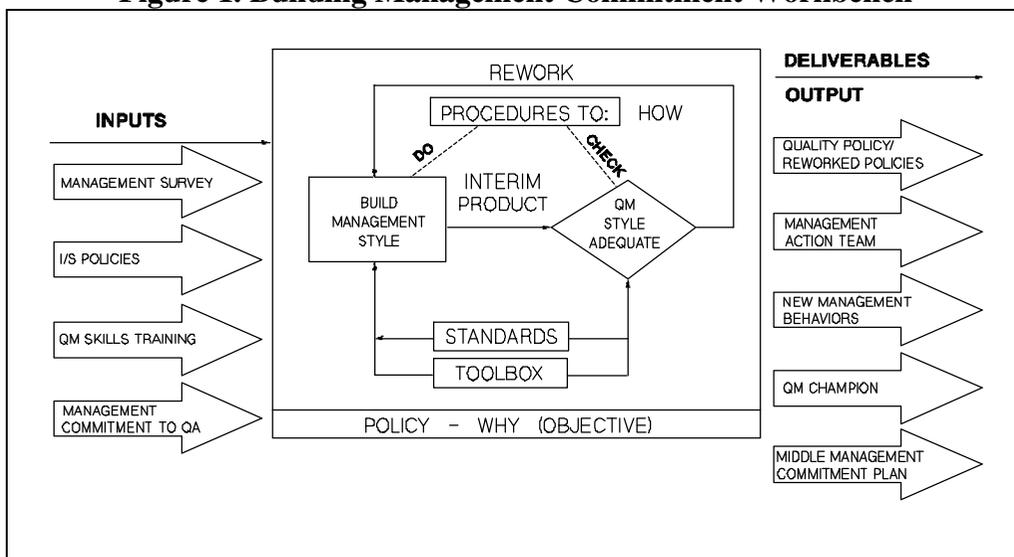
TOP EXECUTIVE COMMITMENT

Just as management commitment is necessary to the success of QM, the commitment of the top executive of the organization is vital. His or her commitment may be the single most important requirement for QM to be a success. The top executive is the indispensable participant. The top executive sets the tone for the whole effort by becoming visible in his or her support for QM. Every employee in the organization, including other managers, will be waiting to see where that person prioritizes QM. If quality improvement isn't number one with the top executive, how can it be with anyone else? One way to assess management's commitment is to review the Management Quality Commitment Survey shown in Figure 4. What priority does your management currently give quality?

PRACTICE WORKBENCH

The workbench shown in Figure 1 is for top I/S management. Top I/S management is the director of I/S and his/her direct reports. The input is the current status of management commitment to QM. The process is one of training and decision-making on the style of management to be used in I/S, and the associated changes needed to use that management style in the day-to-day management of the I/S activity.

Figure 1. Building Management Commitment Workbench



INPUT PRODUCTS

Four inputs are desirable prior to beginning the process for building management commitment to a quality management style. These four inputs are:

- 1) **Management Survey** - One method of finding out where management stands regarding QM is to survey them before QM starts. The results of this survey will have many uses. The survey could be aimed at determining the current attitude toward QM and the current level of QM awareness. Possible candidates for the QM champion (defined below) may be identified based on the results. As a minimum, the survey should cover the areas of job satisfaction, organization satisfaction, management satisfaction, quality, productivity, and the work environment. The currently perceived relative priorities of cost, schedule, and quality should be determined as well as the actual values. The results of the survey should be fed back to the managers of the organizations that are surveyed and used to develop the QM implementation strategy and plan. See Figure 4 for suggested survey questions.
- 2) **I/S Policies** - Management needs to gather together the policies they have issued that provide direction to the I/S staff. These policies will need to be reviewed to determine their impact on a quality management style.
- 3) **Management Commitment to Quality Management (Management Commitment Before QM Implementation)** - In preparation for QM implementation, management must be willing to commit themselves to the following:
 - Understanding the concept of quality management
 - Adopting behaviors required to show commitment
 - Accepting the need to change to participative leadership
 - Leading in the development of a QM implementation plan
 - Leading the formation of the implementation organization

- Leading the planning for process action teams
 - Providing funds for training
 - Providing time for training and meetings
 - Identifying quality standards and measures
 - Publicizing and rewarding results
 - Monitoring and measuring progress
 - Providing personnel and other resources
- 4) **QM Skills Training** - Management needs to acquire training in the concepts of quality, the methods used in practicing quality principles, together with the type of infrastructure and resources needed to successfully implement quality management. Note that QAI provides both a one-day and three-day seminar offering this type of training to management.

IMPLEMENTATION PROCEDURES

This process is best performed during an off-site retreat. It is important to remove top management from its current environment in day-to-day responsibilities to one in which adequate time can be allocated to reevaluating the current management style and making decisions and commitment to a new management style. QAI recommends that an impartial facilitator be assigned to this process. Facilitators can come from organization training department, or other individuals trained in facilitation skills, both within and outside the organization.

The process will generally follow these steps:

- **Step 1** - What type of management style do we have today? This step involves developing a profile of the current management style.
- **Step 2** - How committed are we to a new management style? This step will use the results of the management survey, plus a synopsis of a discussion among the managers present.
- **Step 3** - What needs to be done to move to a quality management style? This step requires a discussion of what was learned through training, plus the perspective of those present at the meeting.
- **Step 4** - What are we willing to do to build a commitment to quality management? Completing this step will result in producing the deliverables from the process.

CHECK PROCEDURES

The checking procedures need to do these three things:

- Ensure lack of commitment issues are addressed--the action plan must be adequate to overcome management's current lack of commitment as expressed in the input survey.
- Ensure adequate resources will be made available to implement the actions/ deliverables.
- Ensure actions are consistent with the QM skills acquired during the QM training.

PRACTICE DELIVERABLES

There are five deliverables that need to be produced as a result of this process. The deliverables are described individually in the following subsections.

Quality Policy/Reworked Policies

Commitment should be expressed to the employees of the organization in writing by developing statements of quality policy and mission. Management should work together as a team to develop these statements. These statements must be aimed at the employees and written so they can understand them. The statements should be concise, establish performance standards, and cover all aspects of quality. Eventually, every existing regulation, procedure, and policy letter in existence should be reviewed to assure that it aligns with the new quality policy. Providing each employee a personal copy of this policy is a good idea. Ford's mission, values, and guiding principles are shown in Figure 2. Examples of other quality policies are found in Figure 3. Once they are agreed upon by the management team, they should be published and distributed to the entire organization. The policy statement will be most meaningful if it is signed by the top managers.

A significant way to show commitment to QM is the establishment of new quality standards. This is top management's responsibility. The standards must call for improved performance. Such a goal will never be pursued, let alone achieved, if top management does not establish the need. This standard must first be applied to management if it is to be received in good faith by the rest of the organization. Top management must personally strive for perfection, measure progress, and

recognize those who do contribute to error-free performance. Employees strive to meet those expectations established for them and model their behavior after the actions of management.

Management Action Team

After receiving their initial QM training, the top management team should operate as a process action team to improve, as a minimum, one management process before QM moves down the organization. This is a very visible sign of commitment and the best way for management to gain a real understanding of the true meaning of QM. Having the top management team improve a management process by working through the eight-stage continuous improvement strategy themselves (see "QAI's Continuous Process Improvement Practice," in Section 4 of the *Change Solutions Manual*) is the best way for them to learn and have an appreciation for what they later will be requiring of their employees. Ideally, each layer of management would do the same thing. There is no better way for management to show its commitment. Employees will follow those who do what they ask others to do. A challenging process to study is the preparation of the annual budget; however, it may be more appropriate to begin with a much simpler process.

New Management Behaviors

The implementation of QM requires a culture change. Learning new types of behavior leads to that change. The following discussion covers some new behavior modes.

Quality Leadership - Leadership is generally accepted as the ability to lead a group in some direction. In that situation, that direction is continuous process improvement. Leadership requires the establishment of a vision, a strategy for achieving that vision, gaining the cooperation required to achieve the vision and, finally, putting in place the organization to continue the vision. The vision management must create is that of a new culture which encourages and accepts change. This new culture should allow all people to work together to maximize their contributions to quality improvement.

Quality leadership should start with leading the movement toward an obsession with quality. Leadership can also include focusing on the importance of the end user and teamwork. New behaviors required of quality leaders include modeling, coaching, and reinforcing.

Figure 2. Ford Motor Company's Quality Statement

MISSION

Ford Motor Company is a worldwide leader in automotive and automotive-related products and services as well as in newer industries such as aerospace, communications, and financial services. Our mission is to improve continually our products and services to meet our end users' needs, allowing us to prosper as a business and to provide a reasonable return for our stockholders, the owners of our business.

VALUES

How we accomplish our mission is as important as the mission itself. Fundamental to success for the company are these basic values:

People - Our people are the source of our strength. They provide our corporate intelligence and determine our reputation and vitality. Involvement and teamwork are our core human values.

Products - Our products are the end result of our efforts, and they should be the best in serving end users worldwide. As our products are viewed, so are we viewed.

Profits - Profits are the ultimate measure of how efficiently we provide end users with the best products for their needs. Profits are required to survive and grow.

GUIDING PRINCIPLES

Quality comes first - To achieve end user satisfaction, the quality of our products and services must be our number-one priority.

End users are the focus of everything we do - Our work must be done with our end users in mind, providing better products and services than our competition.

Continuous improvement is essential to our success - We must strive for excellence in everything we do: in our products, in their safety and value³/₄and in our services, our human relations, our competitiveness, and our profitability.

Employee's involvement is our way of life - We are a team. We must treat each other with trust and respect.

Dealers and suppliers are our partners - The company must maintain mutually beneficial relationships with dealers, suppliers, and our other business associates.

Integrity is never compromised - The conduct of our company worldwide must be pursued in a manner that is socially responsible and commands respect for its integrity and for its positive contributions to society. Our doors are open to men and women alike without discrimination and without regard to ethnic origin or personal beliefs.

Ford Q-101 Quality System Standard, Ford Motor Company, January 1986.

Figure 3. Quality Policy Statements

XEROX

Quality is the basic business principle of Xerox. Quality means providing our internal and external end users with innovative products and services that fully satisfy their requirements. Quality improvement is the job of every Xerox employee.

CORNING GLASS WORKS

It is the policy of Corning Glass Works to achieve total quality performance in meeting the requirements of external and internal end users. Total quality performance means understanding who the end user is, what the requirements are, and meeting those requirements without error, on time, every time.

BAXTER

We will reach agreement on requirements with our end users and suppliers, inside and outside the company.

We will conform to those requirements and perform defect-free work at all times.

Figure 4. Management Quality Commitment Survey

QUESTION	YES	NO
Quality Commitment Questions		
1. Do you discuss quality in your daily conversations?		
2. Do you insert quality messages in your presentations?		
3. Do you require quality as part of performance appraisals and reviews?		
4. Do you review quality in the various aspects of your job?		
5. Do you commit resources to promote quality in your organization?		
Key Management Questions		
1. Are you willing to change your organization?		
2. Will you create the environment for change?		
3. Will you train others and commit resources for that purpose?		
4. Will you demonstrate commitment by your actions?		
5. Will you positively reinforce progress?		

Modeling consists of "Do as I do." Quality leaders show their employees how to act by acting the preferred way. They use the language of QM, manage using statistics, and participate on process action teams. They expect their subordinate managers to do the same modeling.

Coaching simply means helping others do QM correctly. Coaching can take the form of instructing, directing, or prompting others toward desired QM outcomes. Quality leaders look for situations requiring one of these types of coaching behaviors. Instructing responses include correcting, consulting, or reviewing. Coaches instruct when they see that others are not sure how to do something and help them proceed. Direction is required when an employee does not know which action to take next. Direction provides the "what" and the "why" by setting priorities for employees or teams. Prompting is used when others are unsure and need a hint as to the next QM step. Prompting usually follows a request or question. Using managers as QM instructors is the ultimate form of coaching and an excellent way to demonstrate commitment.

Reinforcement is the deliberate effort to praise people for their QM accomplishments. Management must make a conscious effort to look for opportunities to praise employees. This praise should be immediate and specific to the quality improvement action. Positive feedback should become second nature to management. Reinforcement is probably the best source of motivation that a leader can provide. A simple "thank you" may suffice. Never assume you know what employees consider praise. Ask them, then provide the reinforcement they consider appropriate.

Leadership begins with QM knowledge. None of the modeling, coaching, or reinforcing models of behavior could be accomplished without a thorough understanding of QM. Deming's thoughts on the attributes of a leader are found in Figure 5. Note the emphasis on cooperation, coaching, and knowledge of variation.

QAI supports a quality leader behavior model that is outlined in Figure 6. As mentioned before, QM is a cultural change. Adopting modeling, coaching, visioning, empowering, and reinforcing behavior modes is all part of the new culture.

Establishing Mutual Trust - One of the first questions employees ask when they hear that an organization is implementing QM and that management

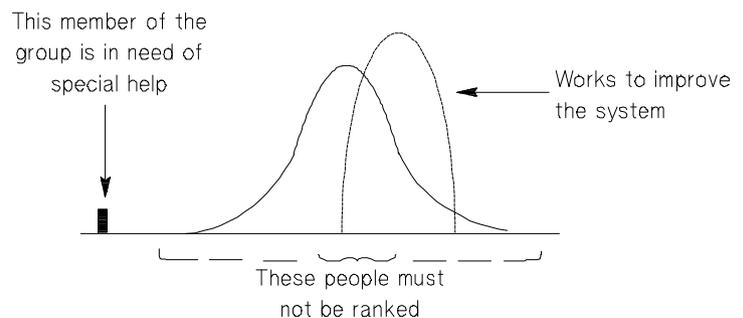
is asking them to help improve quality is, "Can we trust management?" Mutual trust is mandatory for building management-employee process action teams. Management must trust employees enough to ask for their help and to share with them the responsibility for continuous process improvement. Employees must trust management enough to respond to this request by contributing their knowledge and, more importantly, their ideas. Actively listening down, not talking down, can be the first step in establishing trust. Listening down helps establish two-way communication. Listening down carries two-way responsibility. Those being listened to should have something constructive to say. Ideas for improvement, not yesterday's complaints, are needed. Those doing the listening need to be ready to react to the ideas that will be generated. Pushing responsibility down the organization will also help build trust. Decisions for process improvement should occur at the lowest possible level in the organization. Decisions which must be elevated should be responded to in a timely manner. If an idea cannot be used, an explanation should be given to those making the recommendation. A timely "no thank you because" will be accepted. If the employees think they cannot trust management, all is lost.

Union-Management Partnership - Accepting the union, if there is one, as a partner in continuous process improvement is the surest way to both demonstrate management commitment and establish trust. This difficult step is taken by the truly committed management teams. Think of the possibilities! With the union as a partner in continuous process improvement, how can the effort fail? Risk occurs if management is trying to use the union and is not serious about the partnership. A union-management partnership for process improvement is the epitome of participative management. As one of its first acts, management should solicit the union as a partner. How can the culture of an organization be changed if the activity that represents the workers is not part of the change? The union may want to negotiate the impact and implementation of QM, and that is their right. This could be the first step toward continued cooperation. Obviously, this marriage, like any other, cannot succeed unless both partners want success. Patience may be required by management while gaining the union's confidence and support and vice versa.

Figure 5. Some Attributes of A Leader¹

1. He understands how the work of his group fits into the aims of the company. The purpose of this group is to support these aims.
2. He works in cooperation with preceding stages and with following stages toward optimization of the efforts of all stages.
3. He tries to create for everybody interest and challenge, and joy in work. He tries to optimize the education, skills, and abilities of everyone, and helps everyone to improve.
4. He is the coach and counsel, not a judge.
5. His source of power is:
 - 1) Formal
 - 2) Knowledge
 - 3) Personality

A successful leader develops (2) and (3); does not rely on (1). He has, nevertheless, the obligation to use (1) as this source of power enables him to change the system³equipment, material, methods³to reduce variation in output. (Dr. Robert Kiekamp)



6. He uses figures, with knowledge about variation to help him to understand his people and himself. He uses plots of points and statistical calculation with knowledge of variation, to try to understand the performance of himself and of his people. One aim is to try to learn how he himself can improve his leadership. Another aim is to learn who, if anybody, is outside the system, in need of special help. Simple rearrangements of the work might be the answer. Transfer to another job may require prudence and tact, as the man to be transferred may interpret this as one way to get rid of him.
7. He works to improve the system that he and his people work in.
8. He creates trust. He is aware that creation of trust requires that he take a risk (Carlisle and Parker, *Beyond Negotiation*, Wiley, 1989).
9. He does not expect perfection.
10. He listens and learns without passing judgment on him that he listens to.
11. He understands the benefits of cooperation and the ills of competition (Alife Kohn, *No Contest*, Houghton Mifflin, 1986).

¹ Presented by W. Edwards Deming at the Third Annual International Deming Users Group Conference, Cincinnati, OH, August 21-22, 1989.

Figure 6. The Quality Leader Behavior Model

CHARACTERISTICS	BEHAVIORS DEMONSTRATED
SUBSTANCE	Helps others achieve needed substance
GROWTH	Helps others achieve personal/career growth
OPPORTUNITIES	Creates opportunities for others to make uninhibited contribution to the enterprise
ENVIRONMENT	Creates an environment conducive to performance
EMPOWERMENT	Empowers others
OBSTACLES	Removes obstacles to performance
DEALS AND SUPPORT	Helps others do what they decide is in their own best interest
COACHING/TRAINING/EDUCATION	Coaches, trains, educates others
COORDINATION	Helps coordinate the work of others
MARKET/OUTLETS	Creates markets and outlets for talents of others
RESOURCES OTHERS	Acquires resources others need
UNIQUELY EQUIPPED	Equipped to do that necessary for success which others are not capable of doing
STRATEGIES	Creates a vision, communication, trust through positioning, and deployment of self
PERSISTENT	Tirelessly pursues the mission of the organization through linkage with other leaders on strategic issues
ETHICAL, OPEN, HONEST	Maintains a totally open and honest state with others

Cooperation vs. Competition - Competition is "the American way." We learn to compete almost from day one. However, competition within an organization is a hindrance to quality improvement. It stifles communications and creates barriers between functions. Cooperation is required to improve quality and to implement QM. Cooperation leads to increased creativity, reduces fear of censure, and helps the development of a better sense of belonging and acceptance. These are all characteristics of high-quality organizations. Teamwork, one of the cornerstones of QM, is based on cooperation. To facilitate cooperation, the organization needs to focus on teams doing well, allow ample time for teams to operate and achieve improvements, use the language of QM, practice reciprocity, share information, and act cooperatively. Cooperation requires objectivity. An atmosphere based on "I win, you win" as opposed to "I win, you lose" must be established.

Management of Inputs, Not Management of Results - Most managers have been taught to manage results (outputs). This has been reinforced by such systems as management by objectives and most performance appraisal systems. Thus, most managers are results oriented, as opposed to methods (process input) oriented. They focus their efforts on controlling the output (results), not the input to a process. Controlling the output is an after-the-fact judgment; it is reactionary, focusing on the detection of defects.

QM requires control of the inputs to a process. This change in perspective, as illustrated in Figure 7, will be required of all managers. In QM, the focus is on controlling the input to the process (sources of variation), reacting in real time, resulting in the prevention of defects.

Traditional Management vs. QM Management -

Traditional management is practiced by most managers. They have been taught that they must control their employees and their organization. The "I'll tell you what to do, and you'll do it" mentality is the accepted way of managing in this country. Managers have been taught that they are accountable to their manager, not the end user, and hold their employees accountable to them. However, in QM, the end user, not top management, is king. Fire fighting, not continuous process improvement, characterizes traditional management. In some instances, managers start fires so they can look good putting them out. Competition, not teamwork, is fostered under traditional management. "My organization wins, yours loses" is the common objective. Motivation comes from fear of failure, not from within (self) as under QM. QM accomplishment comes from improving processes, not from meeting arbitrary management quotas. QM looks at the long-term impact of process improvement, not the monthly or quarterly bottom line. Many managers look short range because their commitment to the organization is short range, just long enough to make a name for themselves and move on to another organization. They do not assume long-term responsibility for the organization. The focus of QM is quality, not on monthly reports designed to make one look good in the eyes of management.

Quality Management Champion

There is a need for one or more people to champion the cause of QM. Hopefully, a champion will emerge during the planning for QM implementation. This is the person who accepts personal responsibility for the

success of QM without being assigned the responsibility. The champion will be emotionally committed to QM and will see QM as a cause. Ideally, the QM champion would be the top executive in the organization. A QM champion may assume the day-to-day management responsibility for successfully implementing QM. The champion should be someone respected in the organization who sets high quality standards and believes that the organization needs to improve. This "can do" attitude may be the most important consideration. Champions happen naturally; they are not appointed. This person may become the day-to-day leader of QM. The enthusiasm and energy of champions are important factors in the success of an organization. Several managers may assume this role at different times. The need for a champion will last a minimum of two to three years. Several managers may play this role after QM gets rolling.

Middle Management Commitment Plan

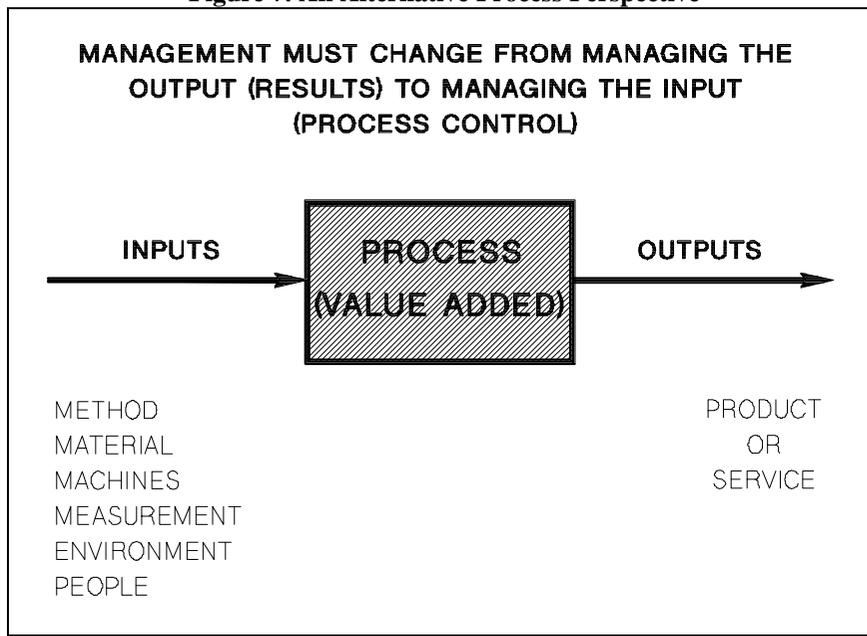
The weakest link in most quality improvement efforts is in the ranks of middle management. Middle management, as experience shows, is the slowest group to accept the process. Care must be taken to include a role for middle management. They should have input to the statements and planning that top management is preparing. Middle management will generally follow the example set by their superiors. They must feel included in all aspects of QM planning and implementation. Special effort is required to assure them that they do have a role as important players. Perhaps the best way to assure their support is to assign them the task of determining their own role. How to include middle management will be an important consideration for top management, because obtaining support for QM from first-line supervisors and employees is relatively easy. A plan to accomplish this needs to be developed.

USAGE TIPS

Quality means conformance to requirements. It also means meeting end user needs. While people say they want quality, their actions may not support this view because:

- 1) Many believe that defect-free information services (I/S) department products and services are not practical or economical,

Figure 7. An Alternative Process Perspective



and thus accept some level of defects as normal and acceptable. (In quality terminology, this is called acceptable quality level, or AQL.)

- 2) Quality is frequently associated with cost, meaning that high quality is synonymous with high cost (see PEO. 1.1 in this manual). (This is a confusion between quality of design and quality of conformance-see definitions and later discussion for an understanding of these concepts.)
- 3) Quality by definition requires requirements/specifications in enough detail that the products produced can be quantitatively measured against those specifications. Few organizations are willing to expend the effort to produce requirements/specifications at the level of detail required for quantitative measurement.
- 4) Many technical personnel believe that standards inhibit their creativity, and thus do not strive for compliance to standards. However, for quality to happen there must be well-defined standards and procedures which are followed.

If achieving quality (i.e., defect-free products and services) was easy, it would have been accomplished years ago. Quality is very difficult to accomplish. It requires the close cooperation of management and staff in order to make it happen. It requires a commitment to quality, and the establishment of an environment in which quality can flourish.

The bottom line is: The challenge of making quality happen is a monumental challenge. It has been best expressed by Dr. Ishikawa, Japan's leading quality expert, when he stated that accomplishing quality requires "a thought revolution by management." Thought revolutions do not come easy.

During the 1960s there was a major emphasis in the United States on zero defects. That movement disappeared almost completely during the late 1960s and early 1970s. While there is a renewed emphasis in zero defects, it may fail again. Dr. Ishikawa observed the zero-defect movement in the United States in 1965 and felt at that time it could not succeed. The following is his analysis of why the movement did not succeed:

- 1) Zero defects was just a buzz word; it emphasized that if everyone did his best there would be no defects.
- 2) Starting from that assumption, it failed to teach participants the quality methods of implementation. It was a movement without tools.
- 3) It decreed that good products would ensue if operation standards were closely followed; unfortunately, operation standards are never perfect. What operation standards lack, experience covers. Workers should observe how standards work, amend them, and then repeat the process.
- 4) The United States has been strongly influenced by the so-called Taylor method. Engineers create work standards and specifications. Workers merely follow. The trouble with this approach is that the workers are regarded as machines. Their humanity is ignored.
- 5) The word "kickoff" in the zero defect movement sounded fine. But it was another term for commanding and forcing the workers to start a campaign for which they had very little enthusiasm.
- 6) All responsibilities for mistakes and defects were borne by the workers.
- 7) The movement became just a big show which encouraged paper compliance.
- 8) There was no headquarters to promote a nationwide movement.

Dr. W. Edwards Deming has stated that it takes 20 years to change a culture from an emphasis on productivity to an emphasis on quality. Obviously, this comes from his experiences in turning around the Japanese economy. Twenty years might be excessive, but you and your management must be prepared to invest 2-5 years before the really large paybacks occur. Quality is a long-term strategy which must be continually nurtured by the quality function and information services management.

The quality professional must possess an in-depth understanding of the definitions and principles of quality. The principles that make quality work are well established and documented. While these principles were established primarily for manufacturing, they are

equally applicable to information services. However, these principles need to be adapted to complement the characteristics of information process.

After the organization has been in the throes of implementing QM for two or three years, management's commitment includes the following:

- 1) Continuing self-education
- 2) Demonstrating by action the change to participative leadership
- 3) Being patient
- 4) Supporting teams with resources and recognition
- 5) Randomly attending team meetings
- 6) Responding promptly to issues elevated to their level
- 7) Managing using quantitative techniques and statistical tools
- 8) Institutionalizing QM

Nurturing New Behaviors

The new behavior patterns should be used on a daily basis. They must become habit, that is, management's customary practice. Old habits must be replaced with these new habits. Establishing a structure or mechanism for ensuring this will happen is recommended. For example, devoting the first several minutes of each staff meeting to the review of QM progress will establish the habit (behavior) of tracking and measuring QM progress. Adopting the "management by walking around" habit reinforces the concept of "listening down." Management at all levels must continuously look for opportunities to review and change their behavior. This may be the biggest challenge to management simply because old habits are hard to break. However, there is no more powerful sign to the rest of the organization that QM is indeed the way of life than the new behavior of management.

Commitment vs. Participation

Commitment does not mean letting QM happen. Commitment is not delegating QM implementation. Participation by management could imply part-time involvement. Commitment is full time. Participation is necessary, but not enough. Willingness to participate can be analyzed by reviewing the key management questions in Figure 4. Management must never become spectators to QM. Participation could be interpreted as playing a secondary role. In QM, management is the first team. Participation will be only part of management's commitment.