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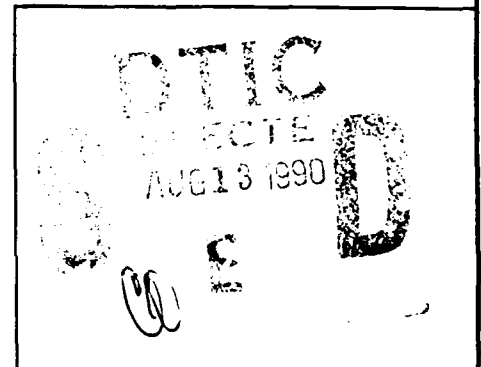
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DEPARTMENT OF DEFENSE

AD-A225 141

TOTAL QUALITY MANAGEMENT (TQM)

Implementers Workshop

TABLE OF CONTENTS

Course Objectives

Upon completion of this course, the participant wiii be able to:

- Describe the steps necessary for successful TQM implementation

- Identify the specific activities that the implementer will do to facilitate the successful implementation of TQM in his/her organizational unit.

Course Objectives

MODULE ONE

COURSE OVERVIEW

Course Overview

TQM TOTAL QUALITY MANAGEMENT

Module One Objectives

Upon completion of this module, the participant will be able to:

- Describe course rationale

- Describe course content.

Course Overview

Course Rationale

RATIONALE:

Help OSD managers design, build, and maintain the management systems
needed for achieving OSD's TQM goals.

PURPOSE:

To provide senior and mid-level managers with practical skills and strategies
for leading TQM implementation within OSD.

Course Overview

RATIONALE:

The course aims to help OSD managers design, build, and maintain the
management systems needed for achieving OSD's TQM goals with efficiency and
effectiveness. A key element in the quality improvement process is a well structured
management system supported by a realistic implementation strategy.
The primary focus of this course is to show how to support and encourage the TQM
infrastructure and implementation strategy.

PURPOSE:

To provide senior and mid-level managers with practical skills and strategies for
leading TQM implementation within OSD. The course presents specific approaches
and methods for planning, organizing, and launching TQM within OSD functions.

Course Framework

Total Quality Management

The Track To Continuous Improvement
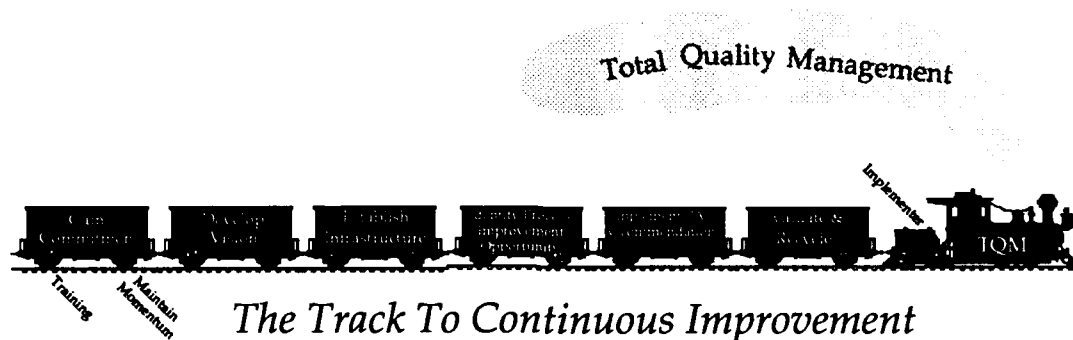
The TQM Train

The secret to implementing TQM in OSD is to get everyone on board the train. Top leadership provides the pull with the implementers' providing a lot of energy to keep the team together.

The Implementer's Role
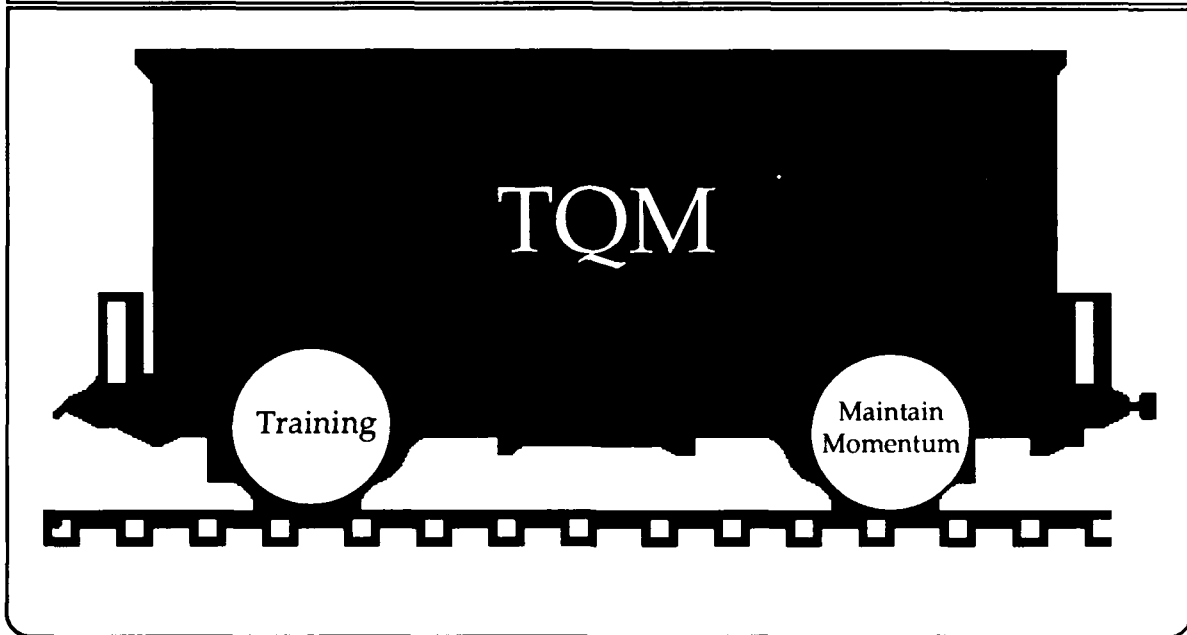
Course Overview

Each of the train cars are main topics discussed in this course. The implementer's role is to provide the 'fuel' in order to gain commitment, develop a vision, establish infrastructures, identify process improvement opportunities, implement PAT recommendations and evaluate and recycle. Training and maintaining momentum (the train wheels) are activities that must be continually performed in order to achieve successful TQM implementation.

Course Content

Eleven Modules

Module 1   Overview
Module 2   TQM Concepts
Module 3   The Implementer's Role
Module 4   Gain Top Management Commitment
Module 5   Develop A Vision
Module 6   Establish Infrastructures
Module 7   Identify Process Improvement Opportunities
Module 8   Implement Process Action Team Recommendations
Module 9   Evaluate and Recycle
Module 10 Training
Module 11 Maintain Momentum

Course Overview

AGENDA

DAY ONE

Time	Module
9:00-9:15	Module 1: Course Overview Introductions, Logistics
9:15-9:30	Module 2: TQM Review
9:30-10:30	Module 3: The Implementer's Role
10:30-10:45	*(Break)*
10:45-11:15	Module 3: The Implementer's Role (Cont'd)
11:15-12:00	Module 4: Top Management Commitment
12:00-1:00	*Lunch*
1:00-2:00	Module 4: Top Management Commitment (Cont'd)
2:00-2:15	*(Break)*
2:15-3:15	Module 5: Develop A Vision
3:15-3:45	Module 6: Establish Infrastructures
3:45-4:00	Summary and Day 2 Agenda

AGENDA

DAY TWO

9:00-10:30	Module 7: Identify Process Improvement Opportunities
10:30-10:45	(Break)
10:45-12:00	Module 8: Implementing PAT Recommendations
12:00-1:00	Lunch
1:00-2:30	Module 8: Implement PAT Recommendations (Cont'd)
2:15-2:30	(Break)
2:30-3:45	Module 9: Evaluate and Recycle
3:45-4:00	Summary and Day 3 Agenda

AGENDA

DAY THREE

9:00-10:15	Module 10: <u>Training</u>
10:15-10:30	*(Break)*
10:30-11:15	Module 10: <u>Training (Cont'd)</u>
11:15-12:00	Module 11: <u>Maintain Momentum</u>
12:00-1:00	*Lunch*
1:00-2:30	<u>Individual Action Plan</u>
2:30-2:45	*(Break)*
2:45 3:00	Summary
3:00-3:15	Evaluation

TQM TOTAL QUALITY
MANAGEMENT   Implementers Workshop

MODULE TWO

TQM REVIEW

TQM Review

Module Two Objectives

Upon completion of this module, the participant will be able to:

• Identify and explain key TQM concepts and principles

• Summarize several other TQM concepts and principles that will be covered during this course.

TQM Review

The purpose of this module is to provide participants with a brief review of major TQM concepts and principles. It also presents several other TQM key concepts that will be taught during this course. If you need additional information, please refer to the student manual, *Total Quality Management (TQM) Awareness Seminar*, that was provided for the Awareness Course. You may also refer to the Reference section provided at the end of this manual for additional readings.

TQM Review

- • All Level Responsibility

- • Principle aspects of the TQM concept

- • Common themes of TQM experts

- • TQM emphasis on process

- • Progression of American management styles

TQM Review

These are some of the concepts and principles we will discuss in this module.

TQM is a concept not a program or a slogan.

TQM brings together all other quality efforts:

- - Model Installation Program
- - Suggestion Program
- - Industrial Improvement Program
- - Personnel Demonstration Projects
- - Gainsharing Programs

These efforts were identified in Appendix A of Booz, Allen's training manual Total Quality Management Awareness Seminar, Revision 5, November 15, 1989. Please refer to this document for further information.

TQM Review

DOD TQM DEFINITION

Total Quality Management (TQM) is both a **philosophy** and a set of **guiding principles** that represent the foundation of a **continuously improving** organization. TQM is the application of **quantitative methods** and **human resources** to improve the material and services supplied to an organization, and the degree to which the **needs of the customer** are met, now and in the future. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a **disciplined approach** focused on continuous improvement.

TQM Review

This definition is further reinforced by supporting statements from the Secretary of Defense.

Reference:
DOD 5000.51G (Draft). Total Quality Management Guide, August 1, 1989.

There is no universal definition of TQM. However, several TQM experts agree that several components must be present and working in order for TQM to be achieved. The following section summarizes these major points.

TQM Review

COMMON THEMES OF TQM EXPERTS

- Customer defines quality.
- Quality becomes prevention-based.
- Team approach to problem-solving.
- Statistical thinking is used to study processes.
- The customer is located internally and externally.
- Management creates the quality culture.
- Management provides for system improvements.
- Continuous improvement.
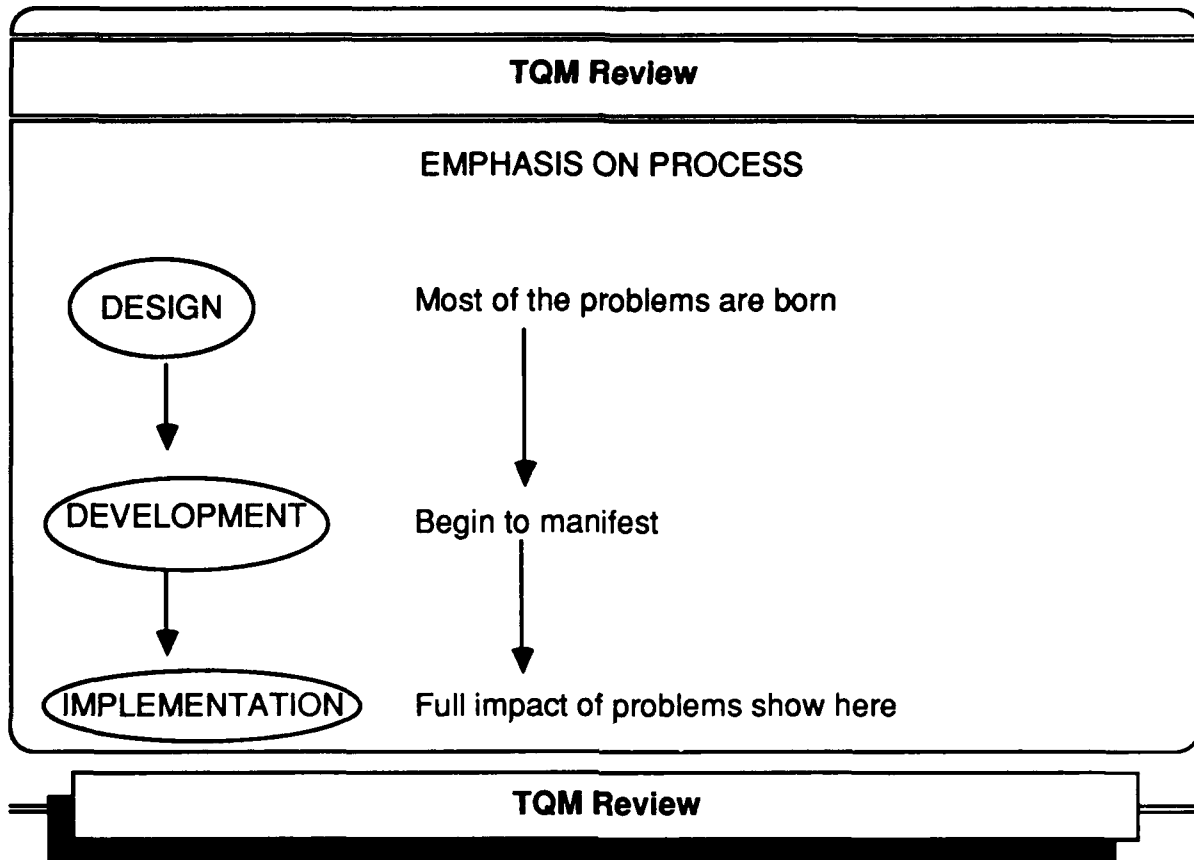- Education and training are vital.

TQM Review

There are many authorities responsible for the quality revolution in the U.S. and abroad. Three of the most well-known and practiced concepts are those of Deming, Juran and Crosby. Though different in approaches, all advocate the quality path to productivity.

TQM Review

EMPHASIS ON PROCESS

CONTROL

NOT IN CONTROL

TQM Review

- In a process, some item, information or person is acted upon in order to be changed. The resulting change, or outcome, is the reason the process exists.

- A process is in CONTROL if it is stable or predictable. Managers need a stable system as a basis for prediction to make improvements.

- A process that is NOT IN CONTROL is the responsibility of management. A change in method, operator expertise, or equipment may be needed to stabilize the process.

- In addition to being in control, the process must be able to consistently produce within the customer's specifications. If a process does not produce within the specified requirements, then management has to alter the process or modify the specifications.

- The way you improve a process is to reduce variation of critical characteristics (bring it into control) or move the average to a higher or lower level to meet specifications and customer needs.

TQM Review

EMPHASIS ON PROCESS

(DESIGN)　　　Most of the problems are born

(DEVELOPMENT)　　Begin to manifest

(IMPLEMENTATION)　　Full impact of problems show here

TQM Review

Process Management:

- Quality Management builds in quality throughout the process with an emphasis on prevention, rather than inspection.

- The inspection method considers quality 'after the fact' and not as part of the process.

Reference:

Adaptation from
Deming, W. Edwards (1986). Out of the Crisis, MIT Center for Advanced Engineering Study: Cambridge, MA.

TQM Review

MANAGEMENT'S PROGRESSION TOWARD MANAGEMENT BY RESULTS

1st Generation	Management by DOING
2nd Generation	Management by DIRECTING
3rd Generation	Management by RESULTS
4th Generation	Management by METHOD

TQM Review
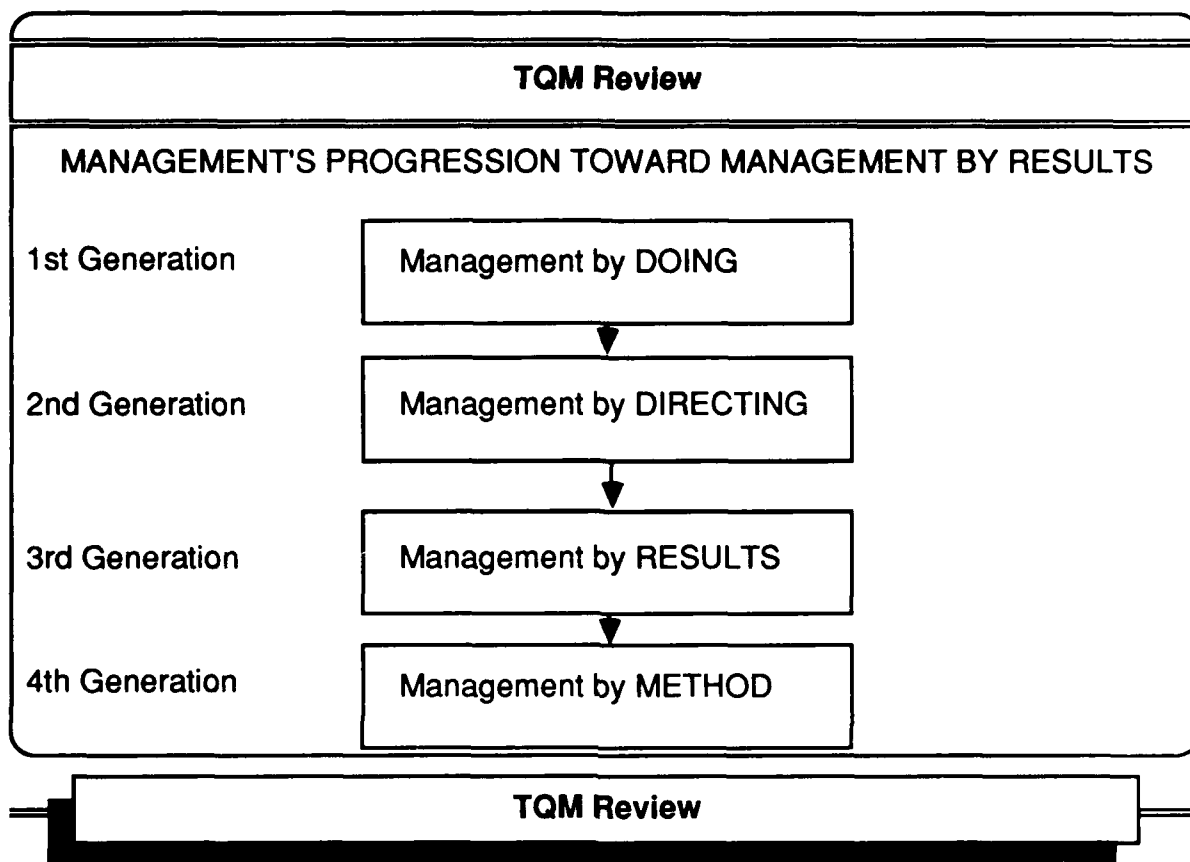
American management styles have progressed through the years:

-   The first generation of management adhered to *management by doing.*

-   The second generation of management adhered to *management by directing.*

-   The third generation of management, the most widely used management style today in the U.S., is *management by results* (also known as Management by Objectives) which provides a systematic hierarchy of control and accountability.

-   However, the more effective management style to take us into the 21st century is *management or rather, leadership by method.*

TQM Review

THAT WAS THEN

THIS IS NOW

TQM Review

GROUP DISCUSSION:

What have you done to improve quality since you received awareness training?

Have you seen TQM activity in your work place?

The Awareness Course was developed with the objective of making OSD employees aware of TQM concepts. If, perhaps, you were not as successful in implementing changes, (i.e, TQM process improvements) in your organization as you had originally hoped, it is the goal of this course to teach you more specific skills to enable you to successfully implement TQM. Your role in this effort is described in the following module.

MODULE THREE

THE IMPLEMENTER'S ROLE

The Implementer's Role

┌───┐
| **Module Three Objectives** |
├───┤

Upon completion of this module, the participant will be able to:

• Describe the existing OSD structure and the impact of TQM infrastructure on it

• Identify key TQM implementer activities

• Discuss the pivotal nature of the TQM implementer's role.

└───┘

The Implementer's Role

The purpose of this module is to describe the implementer's role for implementing TQM in the Department of Defense, OSD or the functional area of the TQM implementer.

The Implementer's Role

The implementer fuels successful TQM implementation.

The Implementer's Role

Your role in TQM implementation efforts may vary according to the level of management support that currently exists in your particular organizational unit, as well as the extent to which your organizational unit is already involved in the implementation of TQM.

We will refer to your role with respect to the "TQM Implementation Train" in the remaining modules in this course. This module details the various activities you will participate in and responsibilities you will have in your role as a TQM implementer.

The Implementer's Role

- Not a position in itself

- A natural responsibility for senior and mid-level managers

- Supports the TQM infrastructure
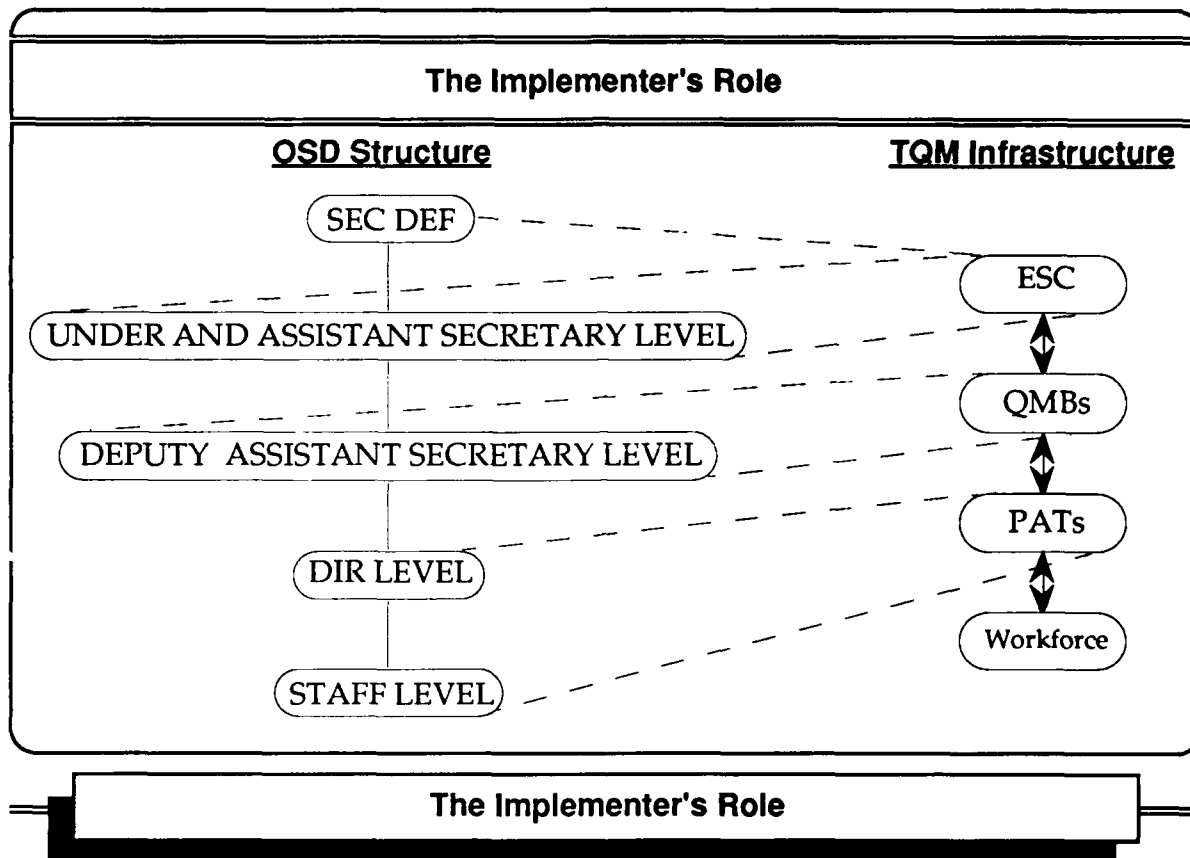
- Cannot be delegated

The Implementer's Role

- The role of the TQM implementer is to help the organization achieve a TQM culture and mode of operation that places quality at the forefront of all activities. The organization is defined as inclusive of the Department of Defense, the Office of the Secretary of Defense, and the functional area of the TQM implementer.

- Being a TQM implementer is usually not a position in and of itself. TQM implementers are senior and mid-level managers working in their functional areas. They have received TQM training and are dedicated to promoting TQM within their functional area. They also work cross-functionally to introduce and sustain improvements in the way work gets done in OSD. As you will learn in this course, TQM implementers are very much involved in promoting TQM. They take responsibility for supporting the actions of TQM Executive Steering Committees (ESCs), Quality Management Boards (QMBs), and Process Action Teams (PATs). ESCs, QMBs, and PATs together make up the TQM infrastructure (their roles are reviewed in Module 6).

The Implementer's Role

- TQM implementation in large functional areas (Under Secretary and Assistant Secretary Level) may be assigned to a given sub-functional manager (Dep. Asst. Secretary or Director Level) while in other similar large functional areas, all managers (Dep. Asst. Secretary or Director Level) will be expected to accept the role of being a TQM implementer. The latter approach is the one preferred.

- Remember, TQM is not a "program", it is a concept that has universal application and therefore crosses all boundaries in the organizational structure. Recognize also that while TQM requires top management commitment to be successfully implemented, it must have senior and mid-level managers equally committed to their role as TQM implementers.

- The responsibilities of the implementer cannot be delegated. TQM involvement must be first-hand on the part of the senior and mid-level managers. This first-hand involvement means gaining understanding of how work procedures are structured. It also requires an understanding of the level of work needed to produce finished products (this should include the cross-functional activities).

- The implementer must realize that TQM can grow significantly from the Middle-Out.* Implementers can initiate improvement policy in their area of influence and achieve significant success. This kind of success serves as an important model for the other functions in the organization.

* Steve Harrington, <u>Process Management: A TQM Approach for Middle Management</u>, American Institute of Aeronautics and Astronautics Inc., 1989.

The Implementer's Role

OSD Structure   **TQM Infrastructure**

(SEC DEF)

(UNDER AND ASSISTANT SECRETARY LEVEL)   ESC

                                                           QMBs

(DEPUTY ASSISTANT SECRETARY LEVEL)

                                                           PATs

(DIR LEVEL)

                                                           Workforce

(STAFF LEVEL)

The Implementer's Role

- The above graphic shows how the TQM infrastructure is imposed on the organizational structure of the Office of the Secretary of Defense (OSD). This infrastructure provides a conduit for increasing cross-functional teaming arrangements to accomplish study, thinking, and decision making about quality improvement in all aspects of the organization's activities.

- The TQM infrastructure is designed to work cross-functionally with the OSD organizational structure. During TQM implementation, ESCs, QMBs, and PATs serve to accelerate investigation of problems and get process improvements supported by top leadership. The infrastructures promote an "ad hoc" climate (not an ad hoc approach, however) that encourages making improvements and provides easier access to top management to gain their support for process improvement. This "ad hoc" climate is an interim condition that has the potential to achieve high levels of success if it is supported and encouraged by top management and implementers. It is important to note that the TQM infrastructure respects the organizational structure.

- <u>The existing organizational structure</u> also has the capacity to surface issues to top leadership. However, its functional nature makes it more difficult to accomplish teaming arrangements. The current structure, *not the people in it*, fosters processes that are not self-correcting toward continuous improvement.

- The complex nature of the OSD organizational structure makes it difficult to move the "administrative machine" to a decision point. This is so for two principal reasons:

  - The administrative process for getting the leadership to a readiness condition for decision making absorbs a majority of the supporting staff's energy and effort.

  - The functional nature of the organization tends to cloud the "grand vision" needed for important issues, and there is a resulting tendency toward sub-optimizing in the analysis of problems.

• **The Implementer's Role**

TQM IMPLEMENTER ACTIVITY

• Promoting TQM practices

• Developing Action Plans

• Need for involvement

• The key four questions

The Implementer's Role

• The TQM implementer has the difficult and rewarding role of bringing the results achieved through the TQM infrastructure into practice in the established organizational structure.

• In the early phases of TQM implementation, this incorporation has to be well planned and promoted. Implementers have to develop action plans to ensure that TQM initiatives achieved through the TQM infrastructure are nurtured and adopted by the larger organizational structure.

• The implementer's activities need to be focused on incorporating the TQM infrastructure and process improvements in the context of day-to-day process actions. A TQM implementer is not a manager checking on how well TQM is being implemented. The implementer is about the business of making it happen.
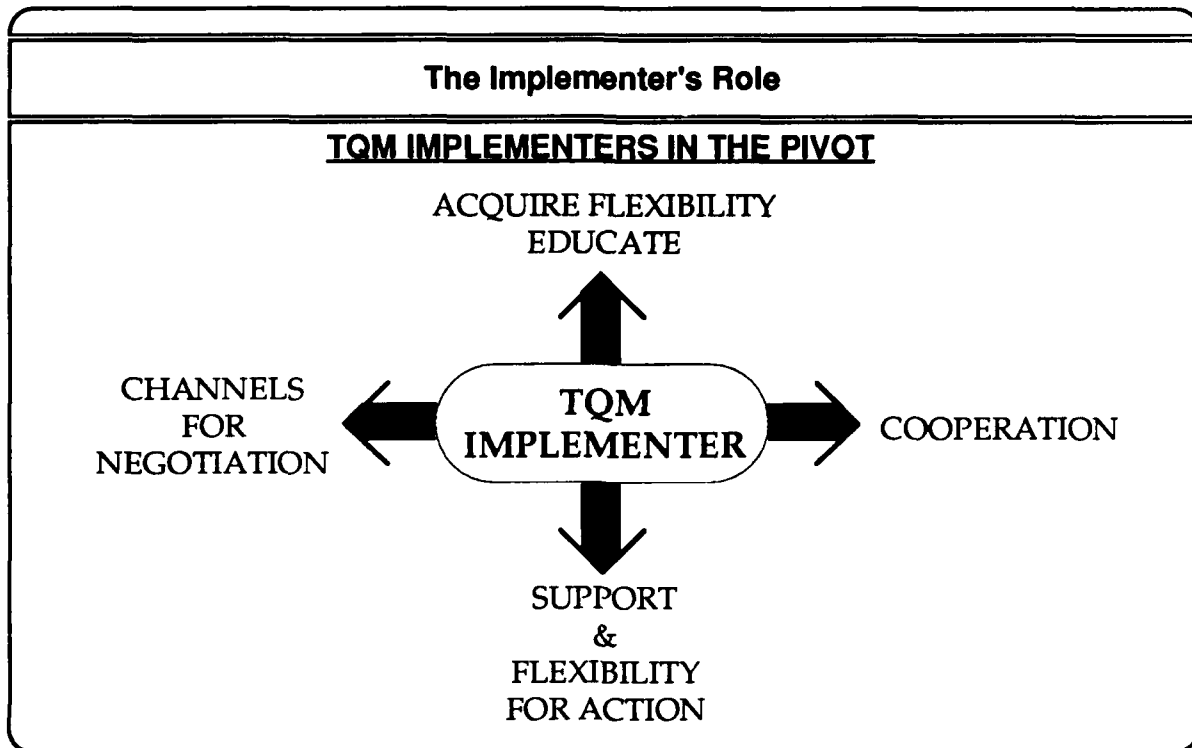
- During this course, the participants will learn that in order for TQM implementation (i.e., process improvements) to be successful, an action plan must be developed, accepted, and followed by all employees involved in the process.

  The action plans must anticipate the complex tapestry of incomplete communications, lack of training, movement of personnel, resistance to change, and the always present press of daily activity. This latter consideration is compelling. In OSD, there are hundreds of issues competing for attention from the staff, and each staff member is forced to fix on how these issues relate to their area of responsibility. They frequently must engage several issues at a time and the pace of the game frequently runs counter to ideas about quality.

- The last activity you will complete during this course is an Individual Action Plan. In this action plan, you will specify activities that you, as an implementer, will take once back in your organizational unit.

  The TQM implementer's plan has to be long on activity and involvement. It does not need to be, nor should it be, a tome of infinite detail. The OSD staff does not need more memorandums and directives; they need assistance in process and teamwork improvements to help get the job done. In this respect, the TQM implementer should always subject action planning to the following questions:

  - Does the staff understand the proposed course of action?

  - Does the staff believe that this course of action is necessary?

  - Does the staff accept the proposal as a guide to improvement?

  - Is the staff willing to train and prepare for the implementation?

- The TQM implementer has to work to get positive answers to these questions. Therefore, the implementer must assume the role of salesman, always on the road talking to clients, in this case OSD staff personnel who must be willing to accept and adopt the idea being proposed.

- Last, but never least, it is also the implementer's role to communicate that OSD top management is committed to TQM implementation efforts and initiatives.

The Implementer's Role

TQM IMPLEMENTERS IN THE PIVOT

ACQUIRE FLEXIBILITY
EDUCATE

↑

CHANNELS
FOR   ← TQM
NEGOTIATION   IMPLEMENTER → COOPERATION

↓

SUPPORT
&
FLEXIBILITY
FOR ACTION

The Implementer's Role

- TQM implementers must see themselves in a pivotal role with responsibilities up, down and across their level of responsibility.

    - Their role looking up is to educate and acquire flexibility for action.

    - Their role looking sideways is to encourage cooperation and establish channels for negotiation.

    - Their role looking down is to give support and flexibility for action.

- The essence of the implementer's task is to get others to see that what needs to be done is consistent with their responsibilities and their long-term self-interest.

- It is also important to convince people of top management's support and commitment, in this case, SECDEF and DEPSECDEF.

GROUP EXERCISE / CLASS DISCUSSION:

For your functional area, answer the following three questions (be specific). Be prepared to share your answers with the class.

1. What will be your toughest "looking up" task?

2. What will be your toughest "looking sideward" task? How much of your day is spent dealing with colleagues. To what extent have you allowed them to tell you what their problems are?

3. What will be your toughest "looking down" task?

In Summary

In this module, we have:

- Described the existing OSD structure and the impact of TQM infrastructure on it

- Identified key TQM implementer activities

- Discussed the pivotal nature of the TQM implementer's role.

The Implementer's Role

Now that you understand your role in the implementation process, the first step in ensuring a successful TQM effort is to gain commitment from top management. The next module provides you with information and strategies about how you, as the implementer, can obtain top management commitment.

MODULE FOUR

TOP MANAGEMENT

COMMITMENT

Top Management Commitment

TOTAL QUALITY
MANAGEMENT

Implementers Workshop

Module Four Objectives

Upon completion of this module, the participant will be able to:

- Understand and select alternative strategies to achieve top management commitment to TQM principles and philosophy

- Assist top management in actively demonstrating visible commitment to the TQM process.

Top Management Commitment

As an implementer of TQM activity in your organization, it is necessary to get top management commitment for TQM efforts you will undertake. You need to get this commitment **before** you begin to promote Total Quality Management. One of the lessons learned from private industry and from government agencies in their efforts to implement TQM is that there is a direct relationship between success of TQM efforts and the involvement and commitment of top management.

This module focuses on how you can get top management to see the value inherent in TQM and discusses the importance of top management demonstrating visible commitment to the TQM process. You will also be given the opportunity to develop an approach to assist top management in selecting ideas for actively demonstrating visible commitment to TQM.

4-2

The Implementer's Role

- Take the Initiative

- Be Creative

- Maintain Enthusiasm

Gain
Commitment

Top Management Commitment

Obtaining management support requires persistent effort, using proven strategies. It is an integral part of the implementer's role to gain top management commitment.

The questions the implementer must answer include, "What initiatives can I take to get the support I need?" and "How can I clarify for top managers the kinds of actions that will be helpful in making TQM successful?".

Upon completion of this module, the implementer will have the strategies needed for gaining top management support and commitment.

It is important to note that these strategies should be used in combination with one another. While gaining top management support is a difficult journey, the success of the implementation effort is dependent on their commitment to TQM.

Strategies

TOP EXECUTIVE BRIEFING AGENDA
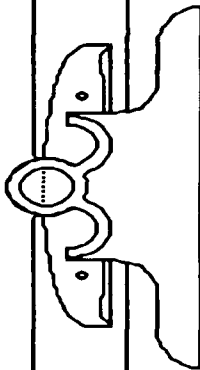
Total Quality at Agency X
- **History of total quality**
- **Results to date**
- **Future plans**

Quality Education at Agency X
- **Phase I (Awareness)**
- **Phase II (Slides)**

Implementation Examples at Agency X

Panel Discussion/Question and Answer Session

Top Management Commitment

One way to convince top management to commit the organization to quality is to hold a **briefing** where other executives from other companies or from other branches of the service brief your top management on their TQM efforts and share candid observations on their experiences with implementing TQM. This approach allows your top management to ask questions of individuals who "have been there" and for the speakers to show your top management how TQM works and what the tangible benefits are.

For example, at Boeing Computer Services, top management did not "buy-in" to TQM until after they listened to briefings by major quality leaders from DEC, Motorola, AT&T and Xerox. An example of an agenda for an Executive Briefing is shown in the slide above.

Similarly, Navy officials visited Xerox, Corning, GM and others before deciding to go forward with their own TQM effort. OSD's monthly TQM briefings are designed to support this strategy. Videotapes of these briefings are available for implementers.


Strategies

SEMINARS ON TQM

EXECUTIVE EVENTS

Top Management Commitment

Another strategy for gaining top management commitment is to have top management **attend a seminar** or workshop about TQM. This will expose them to all aspects of the TQM process. At Corning, the CEO and five top executives attended quality awareness seminars. James R. Houghton, Chairman of Corning said of this experience: "We entered the classroom curious. We left persuaded, even inspired."

As much as possible, all top decision makers should attend an awareness session together. This kind of "executive event" was accomplished by the Defense Contract Audit Agency to start off their TQM implementation.

Top management from OSD, DOD and other OSD agencies can attend TQM awareness seminars. Contact OUSD(A) TQM office for details:

Tom Sheehan
Pentagon Rm. 2A318
695-7915

Strategies

Welcome to
Any Company
USA

Top Management Commitment
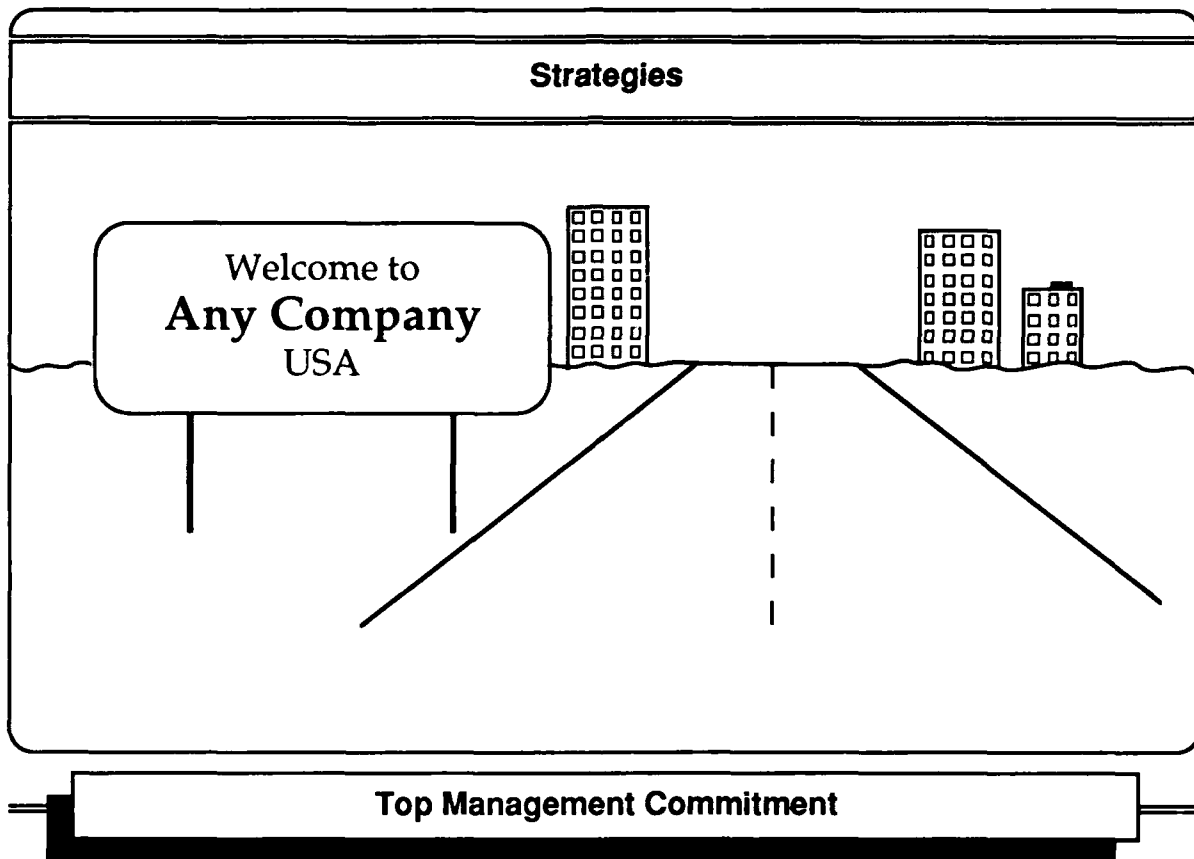
Taking the previous strategy one step further, you can arrange for top management
to **visit other sites** where TQM has been successfully implemented. DON has
several locations (e.g., Naval Publications and Forms Center in Philadelphia, Naval
Aviation Depot in Cherry Point, Naval Shipyard in Norfolk, IRS at the Ogden Service
Center) that could serve as excellent models for these top managers.

OSD also sponsors visits to the Florida Power and Light Company. Florida Power
and Light was the first American Company to win the Japanese Deming award for
quality.

The purpose of these visits is to have the top leadership sense the dynamics of the
culture created by TQM.

Strategies

Know the Success Stories

<u>Private Sector Baldridge Award Winners:</u>
Westinghouse
Motorola
Global Metallurgical
Xerox
Milliken & Co.

<u>Public Sector Presidential Award Winner:</u>
Naval Air Systems Command
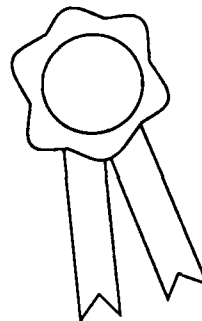
Top Management Commitment

Compiling success stories about other organizations who utilize TQM concepts
and principles is another approach that can be used to convince top management
that quality pays. One way to do this is by profiling results from:

- Private industry
- Government
- Service organizations
- Product organization

It is important that you choose and develop profiles that are relevant to your type of
organization and functions performed. Private and public sector quality award
winners serve as useful models for success stories.

The Baldridge Award is a national quality award presented by the Commerce
Department to private sector corporations. As an implementer, you should know
what the evaluation criteria are so that they can be used for self-assessment.

Strategies

EXAMPLE OF OFF-SITE MEETING AGENDA
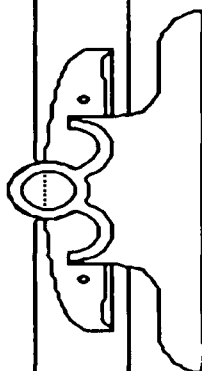
1. Opening-
2. Why Improve?
3. Competitive Status
4. World trends in quality
5. Review of the improvement process
6. Force field analysis on what prevents the organization from being as good as it could be
7. Presentation of a successful improvement process - representative from another firm.
8. Summary and closing

Top Management Commitment

There may already be one or more top managers in your organization who believe in TQM (i.e., "TQM Champions"). In this case you may utilize them to get other top managers committed. **Hold an off-site meeting** or retreat that is led by the "TQM Champion" where members become familiar with the improvement concept and can openly discuss the organization's quality problems. If you do not have any "TQM Champions", you can seek the services of an outside consultant to facilitate a retreat or meeting such as this. An example of topics that might be covered are shown in the slide above.

The Defense Contract Audit Agency (DCAA) conducted such a retreat with Booz, Allen serving as facilitator for a high-level review of how TQM could be implemented in DCAA.

Strategies

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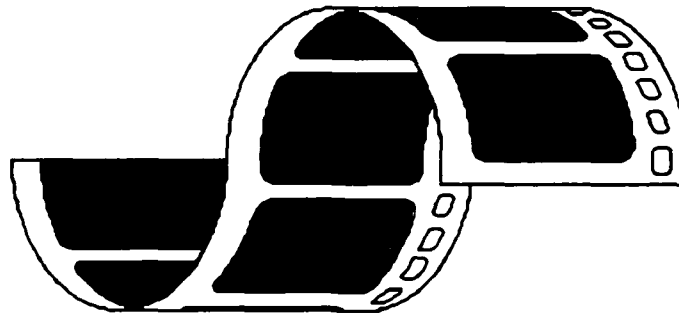
Top Management Commitment

There are a number of excellent films available to show to top management to convince them of the value of TQM. You can contact the Pentagon Library, the Federal Quality Institute or the Office of Personnel Management for current listings of TQM related films. Some examples are:

- Casablanca Nights, 17 minutes, Revlon Corporation. This film identifies and provides approaches to solving quality problems. It also emphasizes the importance of individual responsibility for quality.

- On the Line, 37 minutes. King Arthur Productions for National Semiconductor. This film provides descriptions of actual experiences of four American workers who visited a Japanese factory.

- Quality is Free, 23 minutes. Phil Crosby.

- Japan vs. U.S.A. -High-Tech Shootout, 52 minutes, Films Incorporated for NBC Reports.

- Nashua Seminar, 160 minutes. A presentation by William Conway, president and CEO of Nashua Company, to executives of Ford.

Demonstrating Top Management Commitment

Top Management Commitment

In this process of gaining top management commitment and communicating the inherent value of their (and the organization's) commitment, top management needs to understand their role in the TQM implementation process. Their role is to **provide support to employees and demonstrate their commitment**. As an implementer, you must identify ideas about how they can visibly demonstrate their commitment and be proactive to influence top management's schedule so that these opportunities become a reality.

CLASS DISCUSSION:

What are some ways you would suggest top management demonstrate visible commitment to TQM? In other words, what can top management do to send a clear signal to the organization that TQM is a high priority, requiring long-term commitment from the organization?

- Do you have examples of ways top management in your organization have displayed their commitment to TQM?

- What happened after people started to see that top management was committed to TQM?

Demonstrating Top Management Commitment

- Make TQM an agenda meeting

- Approach problem solving through
  the TQM infrastructure

- Set clear expectations and follow-up

- Attend TQM infrastructure meetings

- Allocate resources

- Recognize quality improvements

  - monetary
  - non-monetary

Top Management Commitment

One of the most important, but most time consuming, ways for top management to demonstrate visible commitment is to **be visible**.

You can suggest that top management make TQM an agenda item in management meetings so that peers report to peers about what they're doing and what progress they are making or what problems they are running into. In fact, making TQM the first item of discussion at all major management meetings will send a powerful message throughout the organization.

Apply the "MBWA" Approach--Management By Walking Around. If you really want to know how processes work, go ask the workforce. The implementer should suggest areas for the walk and provide top-managers with awareness briefings prior to the walks.

Demonstrating Top Management Commitment

Commitment is expecting improvements and setting the example by leading. Setting clear expectations for improvement is a show of commitment. Setting expectations is a first step; consistent follow-up is the essential next step. For example, if a top manager says at the beginning of the year that "we're going to improve productivity" and that's the last you ever hear about it, then in fact you know its not a very salient issue for the organization. So clear expectations and consistent follow-up are decisive ways top management can indicate its seriousness about TQM.

Expectations should be expressed in terms of process improvements not in terms of results. Expectations should also reflect a calm, deliberate commitment to long-term improvement.

Top management should shift problem solving activity to the TQM infrastructure. Additionally, top management should foster cross-functional activity as much as possible in all staff activities.

Top management demonstrates commitment by investing time and resources. It is part of the implementer's role to ensure that top management takes time to attend infrastructure meetings. The implementer should suggest they make a resource commitment (e.g., send a specified number of employees to TQM training).

Furthermore, top management can recognize quality improvements (either non-monetary or monetary). Different options for rewards and recognition will be covered in Module 11. By recognizing and rewarding employees' quality improvement ideas and recommendations, top management sends a clear message that these are the type of behaviors that they want to foster in the organization.

Demonstrating Top Management Commitment

- Become an associate instructor in seminars and courses or make presentations to employees on the quality effort

- Spend time meeting with groups of employees and listening

- Spend time in work areas

- Use videotape to increase top leadership exposure

- Act on suggestions

- Write a position/policy statement about the importance of TQM in the organization

- Write something for the organization's publication

Top Management Commitment

Another way top management can demonstrate visible commitment is to actually get out and teach classes and seminars on the quality initiative within the organization. This is an excellent way to achieve visibility.

Furthermore, you may want to advise top management to meet with groups of employees to listen to their reactions and suggestions, and have them follow up immediately when possible. By listening to a variety of employees at every level, top management can learn about employees' concerns and what is involved in the execution of their employees' work as well as what gets in the way of good work. Remember, management must respond to concerns, follow-up with answers, approaches, and/or resources to help overcome the concern. You could also have top management establish emphasis on TQM with a written policy or position statement or videotape top management talking about the organization's commitment to TQM. For example, the Defense Communication Agency has an excellent video narrated by its director which stresses the DCA vision.
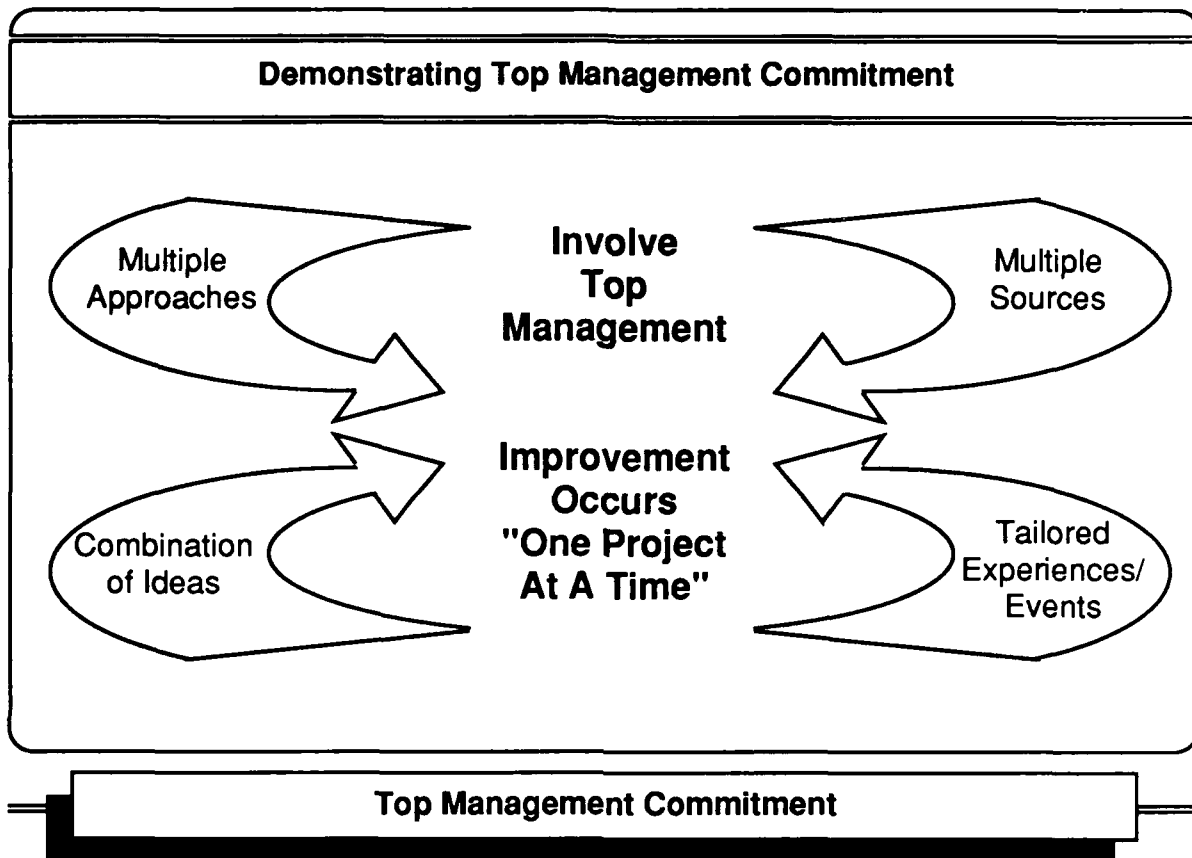
In one organization's annual report, the first six pages talk about TQM and their productivity improvement initiatives. That's a pretty clear signal that productivity

improvement is important.

If you have an organizational newsletter or publication, use it. When Lou Lehr, a top manager at 3M got on the quality "bandwagon" in their company publication, the 3M Megaphone, it really meant something to 3M employees.

OSD has a TQM newsletter that has consistently included strong statements from top management about their support of TQM.

Demonstrating Top Management Commitment

Multiple
Approaches

**Involve
Top
Management**

Multiple
Sources

**Improvement
Occurs
"One Project
At A Time"**

Combination
of Ideas

Tailored
Experiences/
Events

Top Management Commitment

GROUP EXERCISE/CLASS DISCUSSION:

Break into four groups and answer the following questions. Be prepared to share
your answers with the class.

1. What strategies would you use to convince top management that TQM is
   relevant and beneficial to your organization?

2. What barriers might you encounter trying to convince them and how would you
   overcome them?

In Summary

- Top management commitment involves a broad range of activities

- The implementer's role is to encourage and support the activities.

Top Management Commitment

The implementer has to be prepared to take advantage of opportunities to influence the activities of top leadership. Top management should set expectations of process improvement activities, follow-up on process improvement efforts, and recognize improvements and good performance.

In short, keep in mind that the implementer should assist top management as well as other managers, help educate them and make believers and "champions" of them.

After top management is committed to TQM, the next step is to develop the organization vision. The next module addresses this important TQM activity.

MODULE FIVE

DEVELOP

A

VISION

Develop A Vision

Module Five Objectives

Upon completion of this module, the participant will be able to:

* Describe characteristics and components of a vision

* Discuss the development process of a vision

* Discuss ways to cascade the vision and specific division missions and guiding principles throughout the organization.

Develop A Vision

Developing a vision is a crucial step in implementation of TQM. This module focuses on what steps you need to take, and how you fit into the vision development process. Business in OSD is changing, therefore everyone needs to understand organizational business.

The Implementer's Role

- Assist in vision development/modification process

- Integrate vision acceptance process with development process

- Develop a strategy to make vision, mission, values, and objectives come to life for their own work unit

- Assist senior working group in establishing a cascading process

- Coordinate and monitor cascading process

Develop Vision

Develop A Vision

As an implementer, you play a large role in taking the vision, mission, and objectives that most organizations already have in place and bringing them to life. Your role is to ensure that the "how" of each of these is addressed.

Keep in mind that while this activity involves writing and producing vision and mission statements, it is not primarily a writing activity. Rather, it is intensely personnel oriented and demands a great deal of interaction among all personnel in the organization. The objective is to have everyone adopt the vision from his perspective and level. This objective can only be achieved through direct involvement of the organization's senior and middle management.

What Is A Vision?

?

? What Customer Do We Serve
(internal and external)?

? Who Am I a Customer to?

? Why Does This Organization Exist?

?

Develop A Vision

An organization achieves a heightened sense of purpose when its managers address the issues of what customer do we serve and why does this organization exist. The vision can be described as the "why" or purpose of the organization. Everything else (values, objectives and mission statements) should flow from or build on the vision.
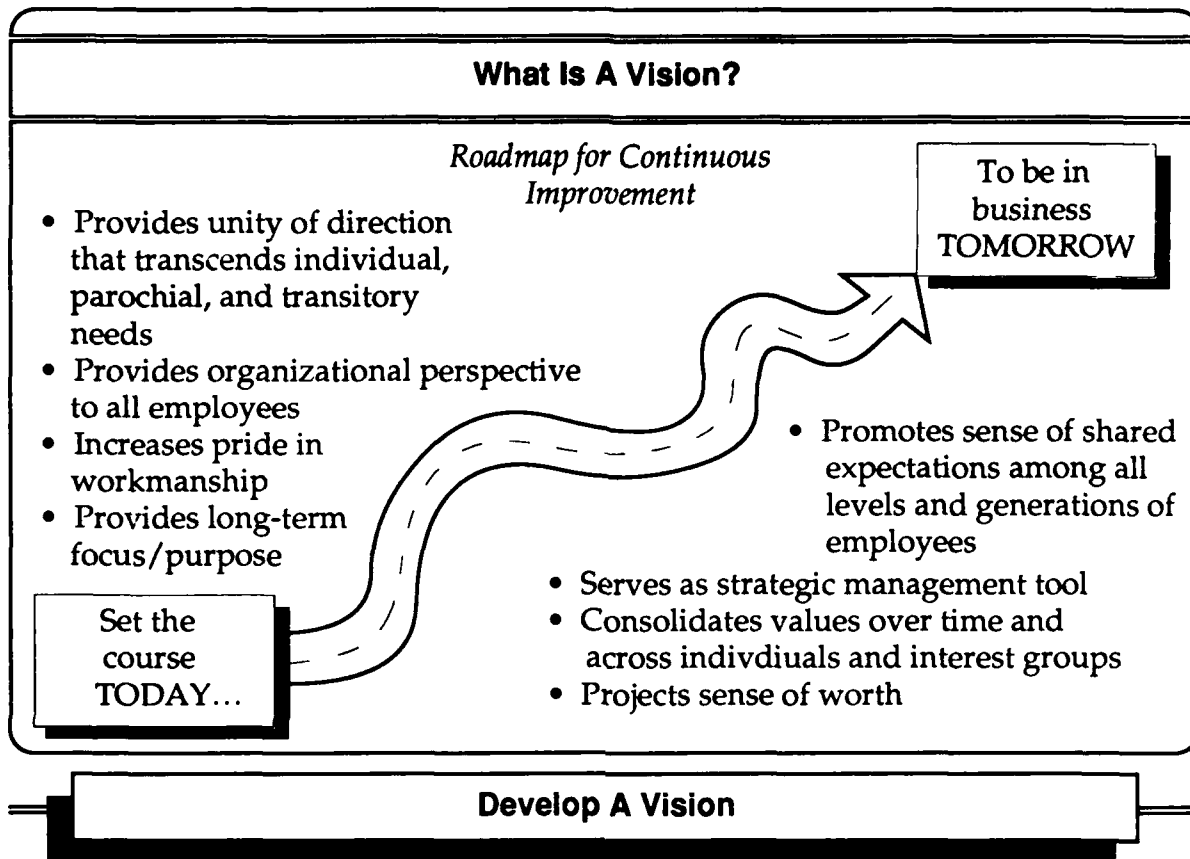
- Establishing of a vision requires implementers to:

    - Innovate: allocate resources for long-term planning
    - Invest in research and education
    - Constantly improve the design of product and service
    - Recognize the customer as the most important part of product/service process.

- When systematically and comprehensively developed, an organization's vision can serve as an invaluable tool in directing the formulation and implementation of strategy, i.e., it provides the basis for strategic business planning.

What Is A Vision?

CHARACTERISTICS

- Innovative/Creative

- Focused on long-term opportunities

- Customer oriented

- Broad

- Identifiable to each and every employee

Develop A Vision

- A vision states the basic goals, characteristics and philosophies that will shape the strategic posture of the organization. It provides the basis for a culture that will guide future improvement actions. Successful managers gain commitment, support and elicit enthusiasm from employees by creating a vision of the work units activities.

- The purpose of a vision is to capture the goals of the unit in a way that inspires group spirit.

- Establishing a vision helps employees, suppliers, and customers focus their efforts towards the overall purpose of the organization.

What Is A Vision?

Roadmap for Continuous Improvement

- Provides unity of direction that transcends individual, parochial, and transitory needs
- Provides organizational perspective to all employees
- Increases pride in workmanship
- Provides long-term focus/purpose

Set the course TODAY...

To be in business TOMORROW

- Promotes sense of shared expectations among all levels and generations of employees
- Serves as strategic management tool
- Consolidates values over time and across indivdiuals and interest groups
- Projects sense of worth

Develop A Vision

A vision provides a roadmap for continuous improvement. Without a roadmap, there is no sense of direction, and no certification of effort towards common goals.
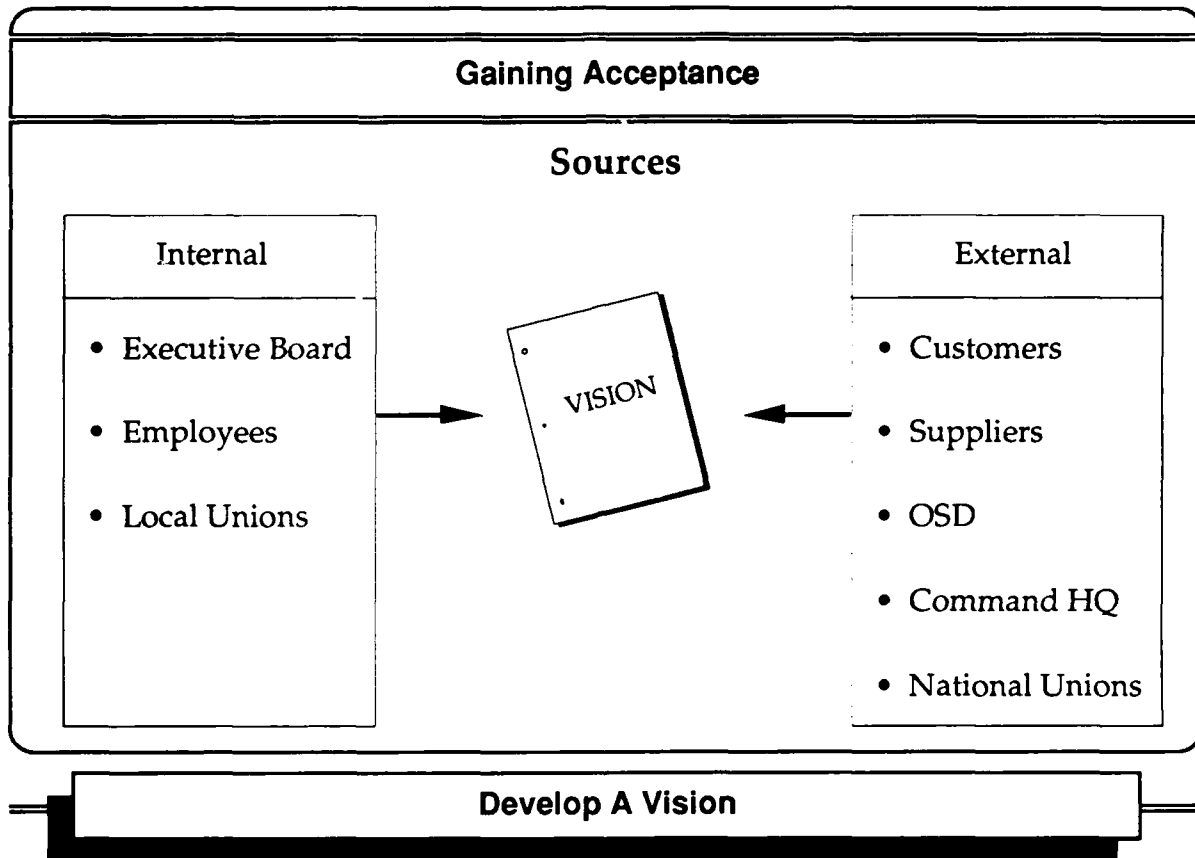
The lack of an accurate vision often results in the suboptimization of goal achievement. For, example, the U.S. Peace Corps has a stated mission, but it did not clearly define its true customer nor anticipate its future needs. As a result, its recruiting efforts focused on satisfying the American public by catering to young, college-educated "generalists" who had a desire to serve. The Peace Corps staff in the host countries consistently received requests for "specialists" skilled in specific areas. This difference in perspectives created a problem because the Peace Corps recruiters were unable to fill requests for skilled personnel, while the willing young generalists were continually turned away. This is an example of two functions within a large organization working on different visions.

When Should A Vision Be Developed?

STOP
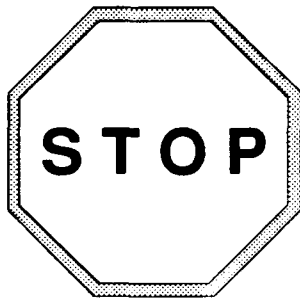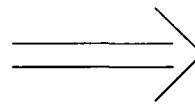
Develop
Vision ⟹

Continuous
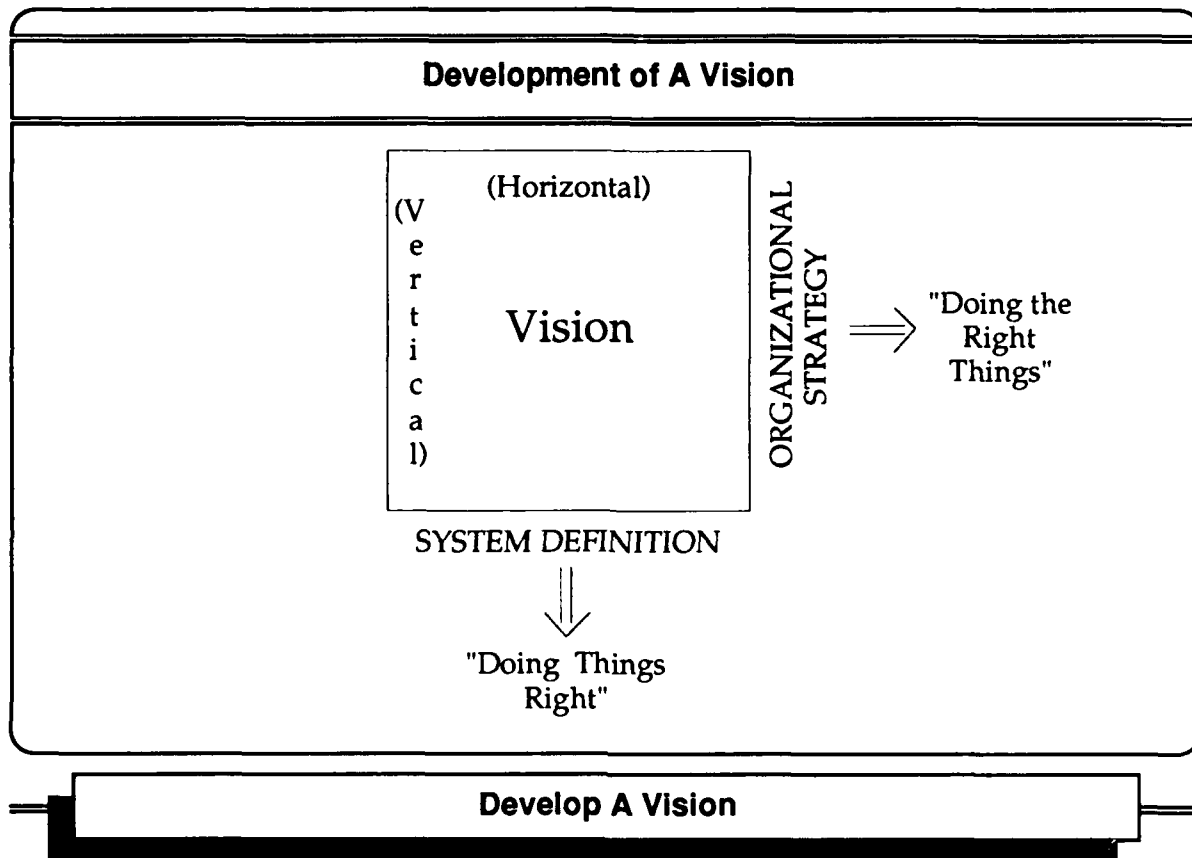Improvement

Develop A Vision

- Developing a vision is a first step in establishing a quality culture. You must ensure a vision is established prior to beginning other steps. A vision provides the roadmap for cha⁻ ⁻ɘ.

- If your organization already has a vision, it may be necessary to reexamine it in light of the characteristics discussed.

- Words are important. They make distinctions and attract attention. However, they only do this if they are meaningful!

  Department of Defense
  We organize, train and equip military forces. We are in the business of making sure they are never used.

Gaining Acceptance

Sources

Internal		External
• Executive Board	VISION	• Customers
• Employees		• Suppliers
• Local Unions		• OSD
		• Command HQ
		• National Unions

Develop A Vision

- The ability to gain acceptance of the vision relies on the ability of the strategic decision makers to successfully incorporate the interest of various groups into the development of the vision.

- The acceptance process must be an integral part of the development process. Attempting to gain acceptance after the development of the vision is too late.

- Four steps should be taken to encourage acceptance of the vision with internal and external groups:

  - Identify internal and external groups who have an interest
  - Understand specific demands vis-a-vis the organization of interested groups
  - Reconcile and prioritize the claims
  - Coordinate claims with other elements of the vision.

- The implementer's role is to integrate the acceptance process with the development process.

Development of A Vision

(Vertical)

(Horizontal)

Vision

ORGANIZATIONAL STRATEGY $\Longrightarrow$ "Doing the Right Things"

SYSTEM DEFINITION

$\Downarrow$

"Doing Things Right"

Develop A Vision

A complete vision includes both:

•   Organizational (vertical) strategy to define what the organization does - the "right" things to meet customer needs. This is a vertical definition because it results in a top-to-bottom view of each unit and it's sub-unit.

•   System (horizontal) definition to specify how to accomplish the strategy - how to do the "right things right". This is a horizontal definition because work gets done horizontally or cross-functionally, not hierarchically.
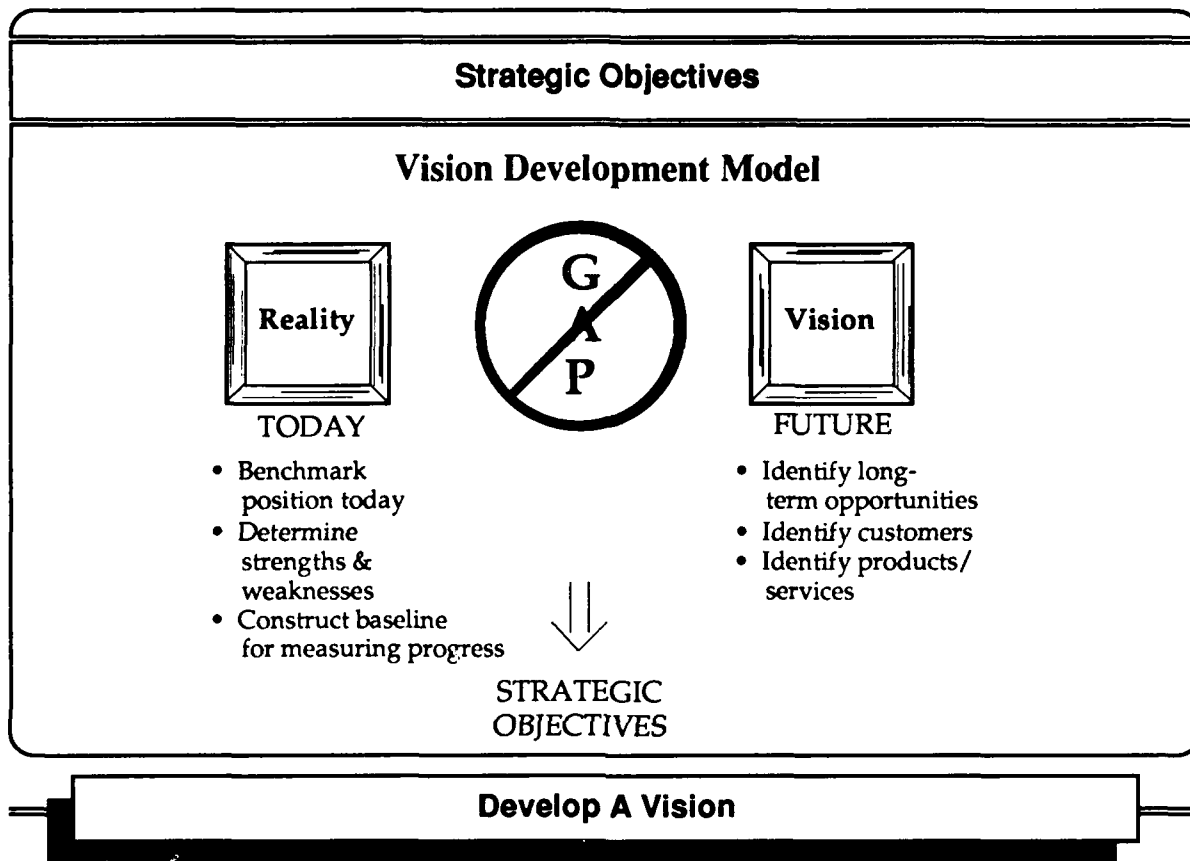
Development of A Vision

Vision Development Model

Reality

TODAY

**G
A
P**

⇓

STRATEGIC
OBJECTIVES
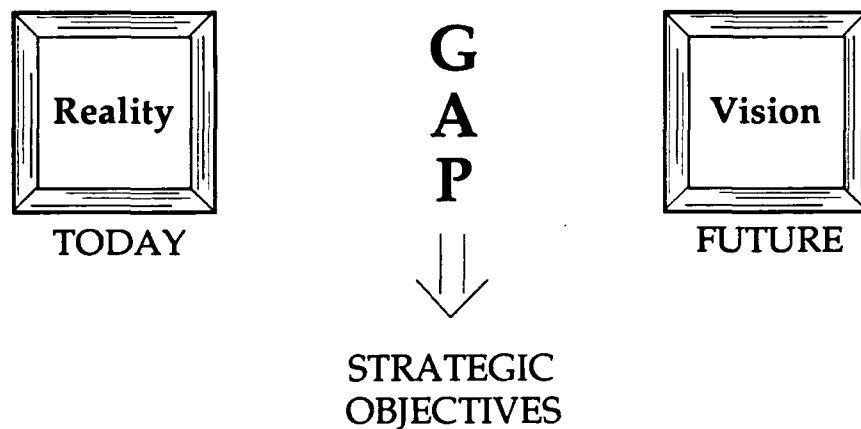
Vision

FUTURE

Develop A Vision

- Before developing a vision, you must first define where you are today, then determine where you want to go, and finally, identify the gap between today and the future.

- The gap between today and the future is translated into **strategic objectives** - the plan to get from "here to there."

- Strategic objectives are the "how's" and "when" and sometimes the "who".

Strategic Objectives

Vision Development Model

```
┌─────────┐          ┌─────────┐
│ Reality │   (GAP)  │ Vision  │
└─────────┘    ⊘     └─────────┘
  TODAY                 FUTURE
```

TODAY
* Benchmark
  position today
* Determine
  strengths &
  weaknesses
* Construct baseline
  for measuring progress

FUTURE
* Identify long-
  term opportunities
* Identify customers
* Identify products/
  services

⇓

STRATEGIC
OBJECTIVES

Develop A Vision

To eliminate the gap between today and the future, you must establish a process to develop strategic objectives.

*   The first step is to develop a picture of where you are today:
    - Benchmark your current position
    - Determine your strengths and weaknesses
    - Construct a baseline for measuring progress

*   The second step is to develop a picture of where you want to be in the future to anticipate your customers' needs:
    - Identify your customers and their anticipated needs
    - Develop mission/statement
    - Develop values/guiding principles

*   The third step is to identify the strategic objectives:
    - Determine difference between reality and vision
    - Set long-term strategy objectives
    - Set short-term strategy objectives

Values/Guiding Principles

- Managerial Philosophy

- Values

Develop A Vision

Values/Guiding Principles reflect the values and priorities of the strategic decision makers in carrying out the mission. Values/Guiding Principles are the "whats," whereas the vision can be described as the "why" or the purpose. Values/Guiding Principles include:

- Basic beliefs, values, aspirations and philosophies of management

- Committed to emphasize their philosophical viewpoints.

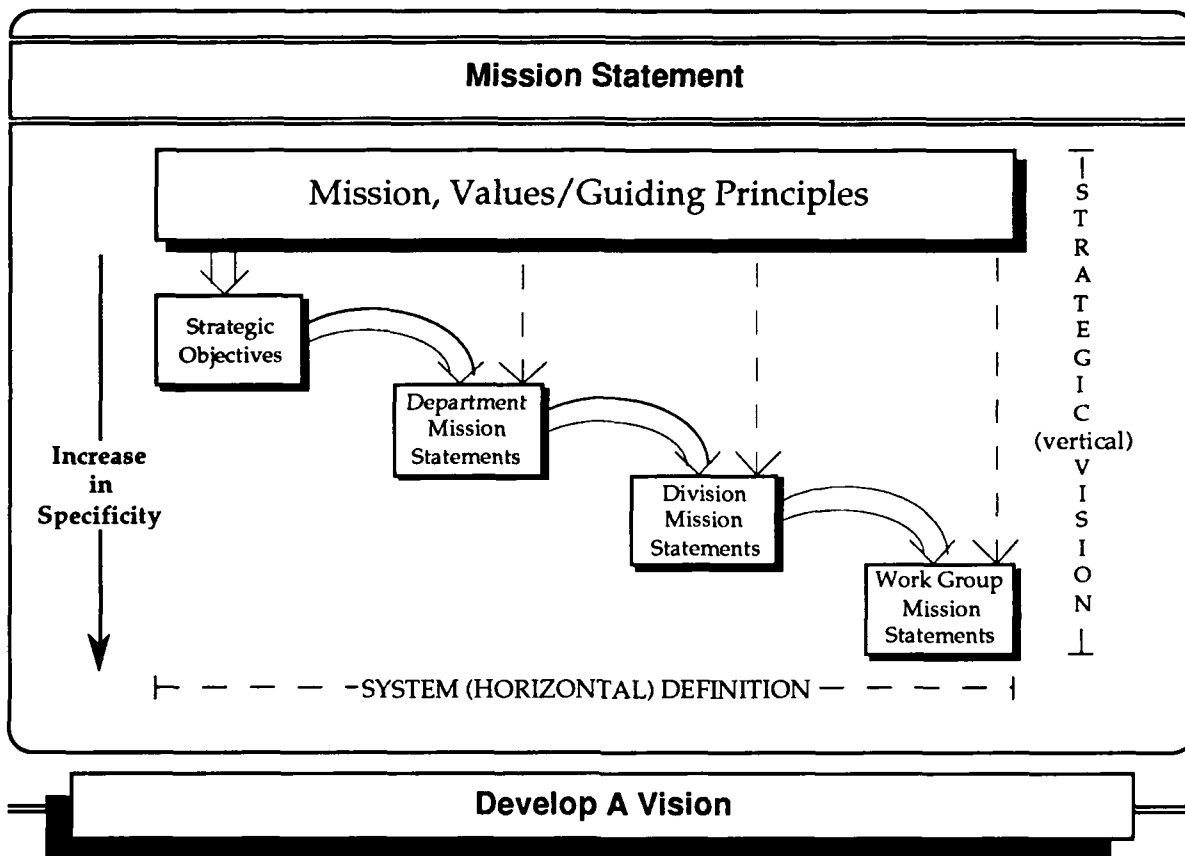Values application help ` an organization accomplish its mission.

Mission Statement

- Products/Services

- Customers

- Technology

Develop A Vision

A mission statement is a broadly defined but enduring statement of purpose that distinguishes an organization from others of its type and identifies the scope of its operation in product and market terms. It should include:

- Basic type of product/service to be offered
- Primary markets or customers whose needs will be served
- Technology to be used in the production or service.

A mission statement is department/division/function specific.

Mission Statement

Mission, Values/Guiding Principles

Strategic
Objectives

Increase
in
Specificity

Department
Mission
Statements

Division
Mission
Statements

Work Group
Mission
Statements

STRATEGIC (vertical) VISION

├ — — — —SYSTEM (HORIZONTAL) DEFINITION — — — — ┤

Develop A Vision

Each department/function down the line needs to transpose the overall vision and mission into specific mission statements values, visions, guiding principles for **their** area.

- The strategic objectives provide the vision for each of the departments to develop mission statements. The department mission statements should support both the organizational mission and values/guiding principles, and the other department mission statements.

- Division mission statements should be linked across departments in support of department and organization missions. Likewise, work group mission statements should support other work groups, divisions and department missions, in addition to the corporate mission and values.

- The horizontal linking structure across the organization will ensure cross-functional consistency in direction.

Vision/Guiding Principles Example

DEPARTMENT OF NAVY VISION STATEMENT

"Our purpose is to maintain a Navy and Marine Corps that can deter conflict because they are trained, organized and equipped to fight and win decisively. To serve this purpose now and in the future, we embrace quality as the foundation of our efforts."

Develop A Vision

The slide above states the Department of Navy vision statement. Their guiding principles/values are identified below:

- Maintain the highest quality Navy and Marine Corps prepared to support the national defense strategy.

- Acknowledge that quality performance means satisfying the needs of those we serve with the best use of our resources

- Emphasize continuous improvement of our processes and operations to enhance mission performance, productivity, and service.

- Recognize that mutual trust and respect are the bases for effective teamwork.

- Provide an environment which assures the dignity of our people, allows them to develop their skills and to take pride in their work as individuals and as team members.

Vision/Guiding Principles Example

•   Cooperation across departments and divisions will help the organization as a whole carry out its mission. There should be communication upward and downward throughout your organization.

Encourage and support the participation of everyone in the pursuit of continuous improvement.

•   Act with the highest standards of integrity and leadership

•   Employ these principles as an integral part of our daily activities.

The next few pages provide an example of how Navy has cascaded their vision throughout the organization.

Vision/Objectives/Values Example

Naval Aviation Depot, North Island

Vision Statement

"We will be the DOD leader in aviation maintenance, engineering, and logistics management through the accomplishment of long range objectives."

Develop A Vision

The specific mission statement of Naval Aviation Depot, North Island is identified below:

"We are vital to our nation's defense. Our highly skilled multi-cultural workforce is dedicated to producing quality products and services, on schedule, at lowest cost to our customers. Through creativity and teamwork we will be the leaders in aviation maintenance, logistics management, and engineering. We are committed to continuous process improvement to ensure fleet readiness." This statement links back to the overall Navy vision statement. The Depot is emphasizing how they will keep the navy equipped.

Their strategic objectives are:

- **Performance:**
  We will continuously improve our performance to ensure that our products and services meet or exceed customer expectations.

- **Technology**:
  We will be at the forefront of new technologies. We will use these technologies to improve naval aviation maintenance.

- **Product** (Marketing):
  We will maintain a significant share of naval aviation maintenance programs. Through conscious decisions, we will maintain or expand existing programs while marketing and obtaining selected new products and services.

- **Organizational** (Design):
  We will create and maintain a flexible organization to meet emerging workload needs.

- **Management** (Practices):
  We will be the DOD leader in contemporary management practices. Our leadership will be recognized by our effective planning, measurement and execution of assigned programs.

- **Facilities and Equipment**:
  We will develop and maintain a *versatile, efficient, secure, safe, clean* and environmentally compatible workplace.

- **Workforce**:
  We will recruit and retain a flexible, multi-skilled, and highly trained workforce.

Each of the strategic objectives identified above needs to be flushed out with the "when" and the "how".

The values/guiding principles are:

- **Quality**:
  We are committed to Total Quality Management and involve our customers and suppliers in our efforts. Constantly improving systems and processes ensure highest quality at lowest cost. Quality products and services = customer satisfaction = our reputation.

- **Customers**:
  We are sensitive and responsive to the needs of both our internal and external customers. Our existence depends upon their satisfaction. Success is when our customers brag about us.

- **Product**:
  Our Nation's security and reputation depend on quality products. We are each responsible for continuous improvement of our products and services.

- **People**:
  Our strength is our multi-cultural and multi-talented workforce. We respect each other. We are committed to personal growth, teamwork and cooperation.

- **Workplace**:
  Our workplace must be safe, clean and secure, with the right tools, facilities and support.

- **Community**:
  We are a responsible member of the San Diego community. We actively participate in civic programs and protect our environment.

- **Mobilization**:
  We provide the industrial, technical and engineering capability to support the fleet worldwide. We have skilled people and capacity to provide immediately support when and where needed.

- **Our Ethic**:
  We operate in an honest and straightforward way. We practice open communication. We deal with each other, our customers and our community with integrity.

- **Responsibility**:
  We are responsible to each other for the quality of products and services we provide. We will continually use these Guiding Principles to direct our daily activities.

Everyone at NADEP, North Island needs to know that these are their guiding principles. Managers need to articulate **how** they will ensure that these things happen within their own areas of NADEP, North Island.

Reference:

NADEP North Island. TQM Briefing, Sept. 1989.

5-19

Vision/Values Example

Naval Avionics Center
Vision Statement

Our Only Reason For Existence Is To Support The Fleet.
In Order To Maximize The Effectiveness Of This Support,
Our Vision Of The Future Is...

The Naval Avionics Center Will Be Recognized
As The Leader In Avionics And Manufacturing Excellence

Develop A Vision

Values/Guiding Principles of the Naval Avionics Center are identified below:

•   The center will foster an environment for continuous improvement in all aspects
    of its operations.

•   Customers are the reason for the Center's existence, therefore customer
    satisfaction is our highest priority.

•   The Center's most important resource is its pool of talented and dedicated
    personnel The Center will establish an environment that fosters mutual respect,
    cooperation and recognition of the importance of individual contributions to
    create a strong, effective team.

•   This Center's strength is demonstrated in its manufacturing capability. This
    capability will be emphasized in all our project pursuits.

•   The Center shall provide the highest quality, most responsive services and
    products.

- The Center shall create a working environment that is not only challenging but conducive to growth and innovation and reflects the cultural demographics of the community.

- The Center shall demonstrate its commitment to individual and team innovation by encouraging and recognizing the application of non-classical approaches.

- The Center is committed to exploiting technology to satisfy the needs of the Navy.

- All Center operations shall be characterized by the highest standards of integrity.

- The Center shall provide an environment to enable employees to achieve the maximum potential.

- The Center shall make positive contributions to the community, commensurate with its capabilities as a Corporate resident of Indianapolis.

<u>As implementers, you need to develop strategies with managers to ensure that these general principles are being applied</u>. For example, at the Naval Aviation Center and the Naval Aviation Depot, North Island, the majority of employees carry laminated cards proclaiming the vision and values in their pockets. Additionally, the statements are displayed prominently throughout the facility. This is a great first step, but what evidence is there that they are doing the things on the cards? <u>That's what's important and this is where the implementer needs to get involved</u>.

Vision/Mission/Values Example

Naval Aviation Depot

Cherry Point

Given the DON vision statement, NADEP Cherry Point took it and developed a specific <u>vision statement</u> for their organization:

"To provide our nation with aviation depot maintenance, engineering and other logistics support."

Develop A Vision

The NADEP Cherry Point <u>mission statement</u> is identified below with quality indicators highlighted:

"To provide our nation with the **highest quality worldwide** aviation depot level ,.,aintenance, engineering and other logistics support **on time** and at the **least cost.**"

This organizational specific mission statement captures what NADEP Cherry Point wants their organization to look. Taking this specific mission statement down another level to answer the question of how will they accomplish this are their organizational specific <u>values and guiding principles</u>:

- We will have customers demanding Cherry Point products and services above all others.

- We provide products and services at lower costs through enhanced vendor relations and continuous process improvement.

- Employees come to work with a sense of anticipation.

Vision/Mission/Values Example

These guiding principles are specific to NADEP Cherry Point. They have recognized that customers, cost and employees all have to be addressed for their mission to be accomplished.

The implementer needs to examine the guiding principles and develop a strategy with managers to address the following:

- How will you get customers involved?
- How will you create an atmosphere of accomplishment and pride?

Cascading the Vision

The
Big
Picture

Develop A Vision
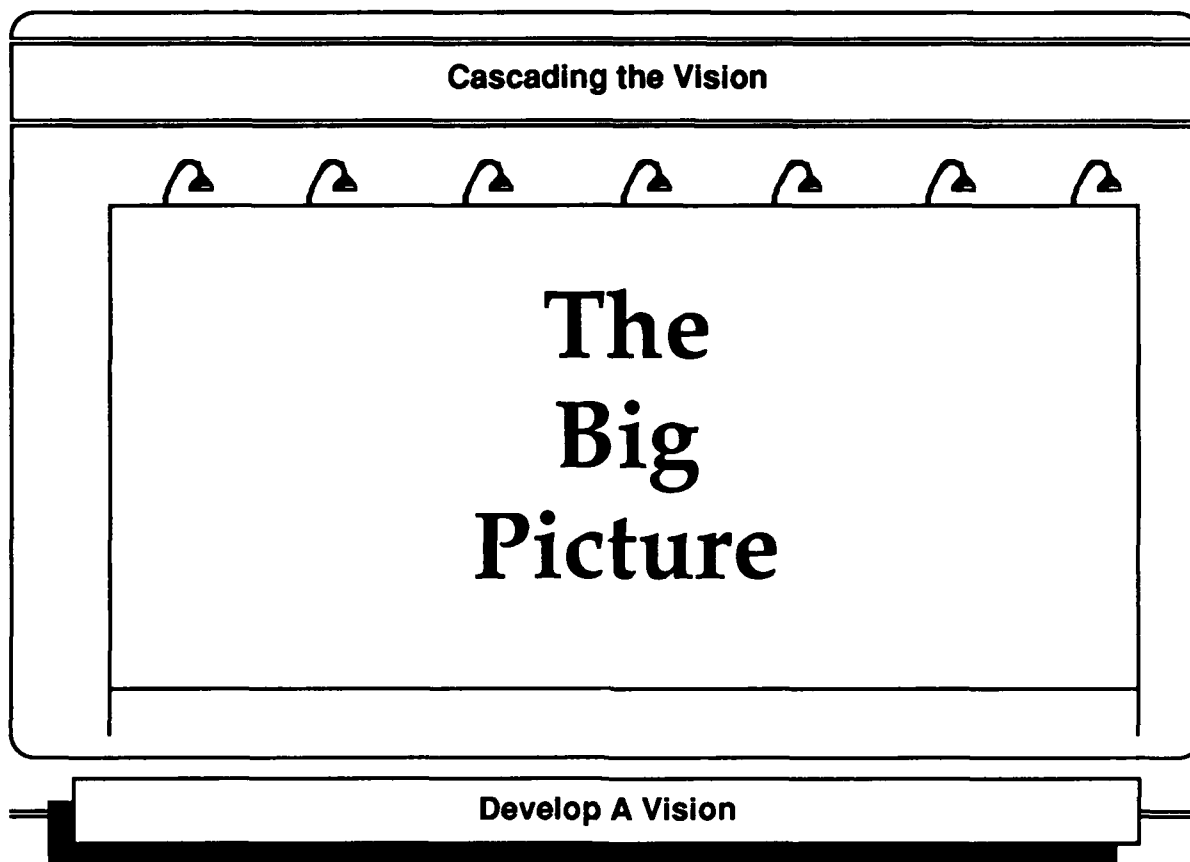
Ideally, the organizational vision should begin at the top and cascade down through the organization with each successive level defining and adapting the vision to fit its particular mission/function. This is important because a unit several levels down may come up with a vision that is contrary to what has been decided at the top.

On the other hand, in the absence of a clearly articulated vision from the top it is possible for a unit several levels down in the organization to devise a vision of how they would like their unit to functions, as long as they communicate that vision up/down and cross-functionally to ensure that it is consistent and does not work at cross purposes with others.

Cascading the Vision

INDIVIDUAL EXERCISE/CLASS DISCUSSION:

Are you aware of your organization's vision? If so, what suggestions do you have to cascade the vision throughout the organization.

If you are unaware of a vison for your organization, how would you go about finding out if there is a vision for your organization?

Cascading the Vision

HOW TO COMMUNICATE VISION

- Common strategic language

- Simplicity/specificity

- Testing for understanding

- Repetition

- Relevance

Develop A Vision

There are five essential components for effectively communicating vision:

A Common Strategic Language: use terms which have the same meaning to all employees.

Simplicity/Specificity: for strategy to be implemented effectively, it must be kept simple so that any employee can understand and apply it.

Testing For Understanding: The first test of how well someone grasps the essentials of a message comes from observing that individual's behavior. When behavior reflects the message, you know you have gotten through. Testing for understanding means asking others to repeat the message in their own words or to discuss how it would be applied to their own area. This increases the likelihood that understanding and action will square with strategic expectations.

Repetition: Repeat the message about vision as often as you can. Assuming that a strategy is well understood could be deadly to your organization's strategic health. Repetition is a good antidote.

Cascading the Vision

<u>Relevance</u>: What are the implications of vision for my area of responsibility?
Getting managers and key contributors down the line to ask this question is an
important step in having them lay claim to vision.

Reference: <u>Vision in Action</u>. Chapter 6. B. Tregoe, J. Zimmerman, R. Smith and P.
Tobia

Cascading the Vision

Mediums for Strategic Message

- No one best medium to express vision

- Array of alternatives

- Little need to invent new ones

Develop A Vision

As messages move along the nerves of an organization's communications network, they can be delivered in many different ways:

- One-on-one discussions
- Formal and informal meetings
- Press releases
- Annual report/meetings
- Briefings
- Work unit newsletters
- Advertising copy

- Special brochures
- Pamphlets
- Memos
- Videotapes
- Social events
- Top management letters

The most effective way to move the vision is to use the existing communication channels, making sure the effort is well coordinated. The least effective way to communicate is to rely on the one-way, "say-and-tell" session or on a pamphlet, where there is little opportunity for participant involvement. Pretesting the medium is a must. Put yourself in the place of the audience.

In Summary

- Visions Create Enthusiasm

- Visions Inspire

- Visions Unite

- Visions Direct

Develop A Vision

As vision moves along the strategy/operations continuum and down through the organization, it takes broad and effective participation to make it come to life Through it all, vision must be kept clear, specific and simple-simple enough to put in the heads, hearts, and hands of the people who make an organization what it is and what it will become.

MODULE SIX

ESTABLISH

THE

INFRASTRUCTURE

Establish The Infrastructure

Module Six Objectives

Upon completion of this module, the participant will be able to:

- Discuss the implementer's role in supporting the infrastructure

- Specify the types of infrastructures that are necessary for successful TQM implementation

- Describe the functions of ESCs, QMBs and PATs

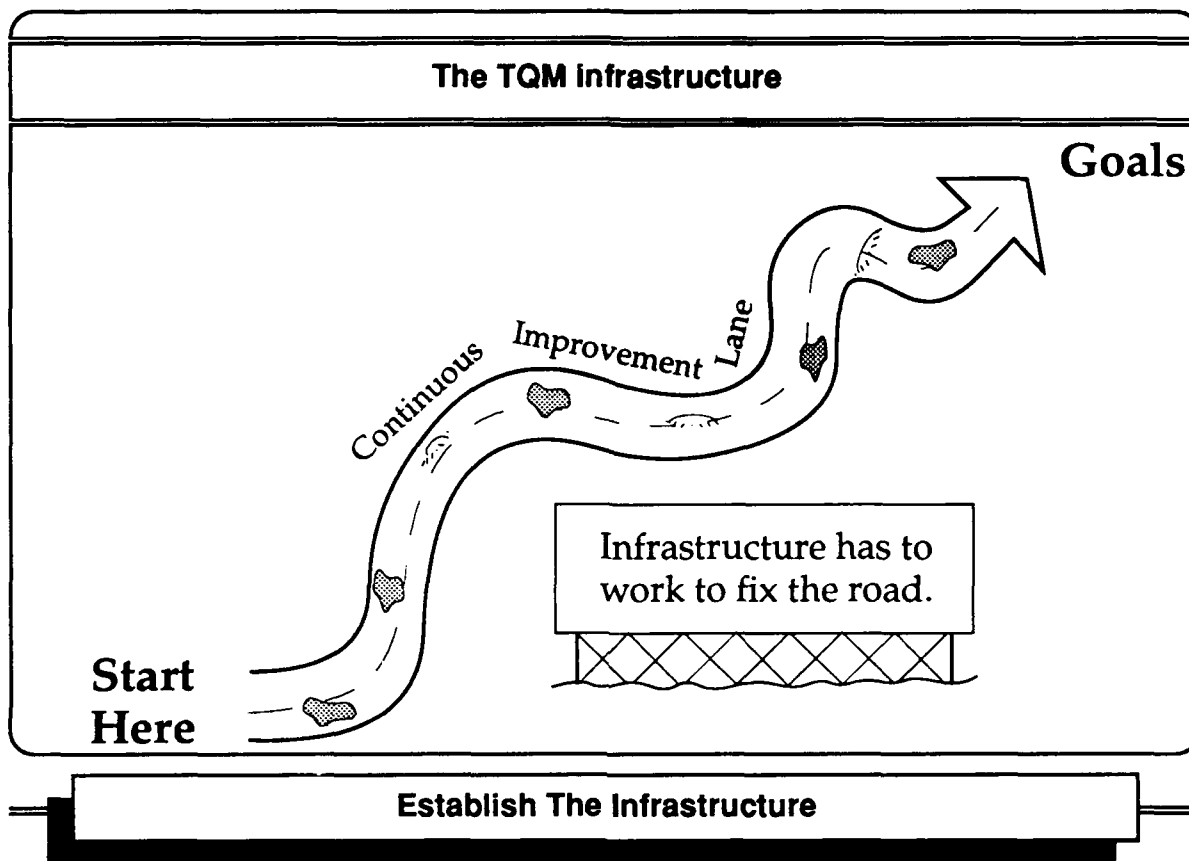- Describe the actions necessary for establishing the TQM infrastructure.

Establish The Infrastructure

Having discussed the importance of establishing a clear and accurate vision and cascading the vision throughout the organization, we turn to a discussion of the infrastructure that needs to exist for successful TQM implementation; Executive Steering Committees (ESCs), Quality Management Boards (QMBs), and Process Action Teams (PATs). The functions of each of the components of the TQM infrastructure are discussed in this module with an emphasis on the implementers role in establishing and supporting the activities of the infrastructure.

The Implementer's Role

- Assist structures getting established

- Educate managers and employees regarding infrastructure activities and goals

- Publicize and provide information regarding infrastructure accomplishments.

Establish
Infrastructure

Establish The Infrastructure

The implementer's role in supporting the infrastructure is a tough one. Top management establishes the infrastructure, but senior and middle management have to establish the relationship of the infrastructure to the organization.

The TQM Infrastructure

Goals

Continuous Improvement Lane

Infrastructure has to
work to fix the road.

Start
Here

Establish The Infrastructure

The organizational TQM infrastructure must be established to foster continuous
management/executive level guidance and modeling. The road to successfully
implementing TQM process improvements is a rough one with bumps and potholes.
With the complexity of the organizational structure currently inherent at OSD, people
may ask: "Why can't TQM things be done utilizing the existing structure?"
Accomplishing the goals of TQM requires cross-functional participation and goal
setting in work activities. The traditional OSD structure does not foster this type of
teamwork.

The traditional structure is often challenged by management using "ad hoc" groups
with cross-functional representation. However, many such "ad hoc" activities
encounter problems when trying to get their recommendations implemented. In
short, these "ad-hoc" committees are not linked properly to top leadership or the
organizational structure. They lack the capacity to have their recommendations
implemented. Many a good "ad hoc" report has ended up on the shelf gathering
dust.

The TQM Infrastructure

The cross-functional nature of ESCs, QMBs, and PATs is designed to overcome obstacles such as stovepiping and management insulation. The leadership involvement in infrastructure increases the success rate of quality improvement ideas.

CLASS DISCUSSION:

What do you know about the TQM infrastructure in your particular agency? (components in place, area's being studied, membership,etc...)

Have you been asked to support or are you supporting the infrastructure in any way? If so, how?

Functions of the Executive Steering Committee (ESC)

- Develop philosophy, constancy of purpose, and guiding principles

- Focus on critical processes that affect customer satisfaction and/or major cost

- Identify an "owner" of each critical process

- Resolve organizational and functional barriers

- Provide resources, training and rewards

- Establish criteria for measuring outputs/customer requirements

- Measure progress vs. goals.

Establish The Infrastructure

Executive Steering Committees are composed of senior managers in an organizational unit. Their main purpose is to identify and prioritize improvement issue areas. Examples of individuals who would be on ESCs are:

- Deputy Secretary of Defense
- Deputy Undersecretary for TQM
- Undersecretary of Defense Acquisition
- Undersecretary of Defense Policy
- Other assistant secretaries
  - Comptroller
  - Force Management and Personnel
  - Health Affairs
  - Legislative Affairs
  - Public Affairs

Functions of Executive Steering Committee (ESC)

The ESC is composed of top level leadership. ESCs also differ from other traditional committees in that members of the ESC are the only individuals who attend the meetings. The ESCs also function without a large support staff. The reason for this approach is to encourage ESC members to come prepared to discuss alternatives and to make decisions. ESC members get training in TQM concepts and they are encouraged to resist the temptation to get more staff to "fix" the problem or to let time clarify uncertainty.

ESCs have a regular meeting schedule whose continuous and only topic is always **quality and process improvement.**

ESC members have to do more than attend meetings and give speeches, and this is where implementers should be active. As much as possible, implementers should work to create events where ESC members are able to address the OSD staff about their vision for the Department. Implementers should also surface information packages to ESC members that explain some of the processes used by the OSD staff to get the work done. These kinds of actions are not easy to accomplish because ESC members all have very busy schedules. However, the emphasis on quality can be used to establish a degree of priority and to justify time with an ESC member on the basis of their need to be updated on quality matters.

Functions of Quality Management Boards (QMBs)

- Identify processes in assigned issue area

- Prioritize processes by improvement potential

- Establish Process Action Teams when appropriate

- Provide Process Action Teams with training

- Develop improvement plans, methodology, and metrics to measure progress vs. goals

- Track and report progress and provide help if necessary

- Help remove barriers.

Establish The Infrastructure

Quality Management Boards (QMBs) (the alter ego of the ESC) identify improvement opportunities and issue areas. QMB members have the responsibility and authority to change processes when change is needed. QMBs are normally organized around cross-functional issues. It is possible for one QMB to have more than one Process Action Team under their direction.

Examples of individuals who would be on QMBs are individuals at the:

- Assistant Secretary level Directors, Managers, Supervisors
- Deputy Assistant Secretary level Directors, Managers, Supervisors

Membership on QMBs should be representative of all the organization's functions. For example, the Naval Air Engineering Center (DON) has established QMBs around the functional areas of: Business Management, Engineering Products and Services, Human Resource Management, and Base Operations and Support, to name a few. Specific Process Action Teams (discussed next) are chartered by each of the QMBs and study processes that need improvements.

Functions of Quality Management Boards (QMBs)

An example of a QMB currently in place in OSD is the QMB for Acquisition. There is also an administrative QMB.

QMBs also conduct their meetings with principles only. As with ESCs, QMBs are not supported by a large support staff because the QMBs working environment is designed to foster cooperation and provide board members insight into the problems of their respective functions.

QMBs don't function as an audience for briefings! It's a roll up the sleeves environment where the membership has to do more than show up to listen.

One of the key roles of the QMB is to support their PATs and to help remove barriers preventing their progress.

Functions of Process Action Teams (PATs)

- Involve those who do the work in the improvement process

- Apply a structured performance improvement methodology to deal with specific process problems and identify improvement changes

- Recommend solutions and measurement systems for process control and feedback to the QMB.

Establish The Infrastructure

The purpose of a PAT is to generate ideas for process improvements in order to gain improved productivity. The roles of the QMBs and PATs are complementary in that QMB members are drawn closer to the process of how work gets done and the PAT members are drawn closer to the larger purview of QMB responsibilities.

Examples of individuals who would be on PATs are:

- Directors and Assistant Directors, Managers, Supervisors
- Action personnel
- Any level of personnel who are involved in doing the process.

Examples of PATs in OSD are:

- Source selection
- Correspondence flow
- Policy signature levels
- Paperwork reduction

Functions of Process Action Teams (PATs)

An example of a PAT success at the Naval Air Engineering Center, PATs have been developed to study and have improved the following processes (with a total projected savings of $607,055):

- Professional Promotion
- Purchase Request Preparation
- Compressed Work Schedule Change
- Test Department Training
- In-House Printing of Training Workbooks

Reference:

Naval Engineering Center Total Quality Management Briefing, Lakehurst, NJ.

Establishing the TQM Infrastructure

Top Management (ESC) Broad Area   Acquisition
- Philosophy
- Relationships between
  government and industry

Mid Level   (QMB) More Specific   - Establishing analytical rigor
- Identifying acquisition system
  elements
- Focusing efforts of PATs

Action Worker   (PAT) Detailed   - Analyzing a specific type of
  acquisition
- Detailed documenting of process
- Recommending improvements

Establish The Infrastructure

Establishing ESCs, QMBs and PATs does not add to organizational layering or create more work. Rather, the infrastructure pulls together and organizes quality assurance activities to ensure they are being done effectively.

During TQM implementation, the infrastructure serve to accelerate investigation of problems and getting process improvements supported by top leadership.

Other government agencies have established infrastructures that do not use the same names (ESCs, QMBs, and PATs) as in OSD. Organizations call their infrastructure what they like based on their mission and needs. Their roles, however, remain the same. The next few slides illustrate infrastructures in different government agencies.

Establishing the TQM Infrastructure

Naval Avionics Center

"ESC"	CIC	• Senior Managers • Establish focus areas
"QMB"	Focus Teams	• Chaired by CIC member • Crossfunctional membership • Define elements
"PAT"	Element Teams	• Lead by focus team member • Address issues

Establish The Infrastructure
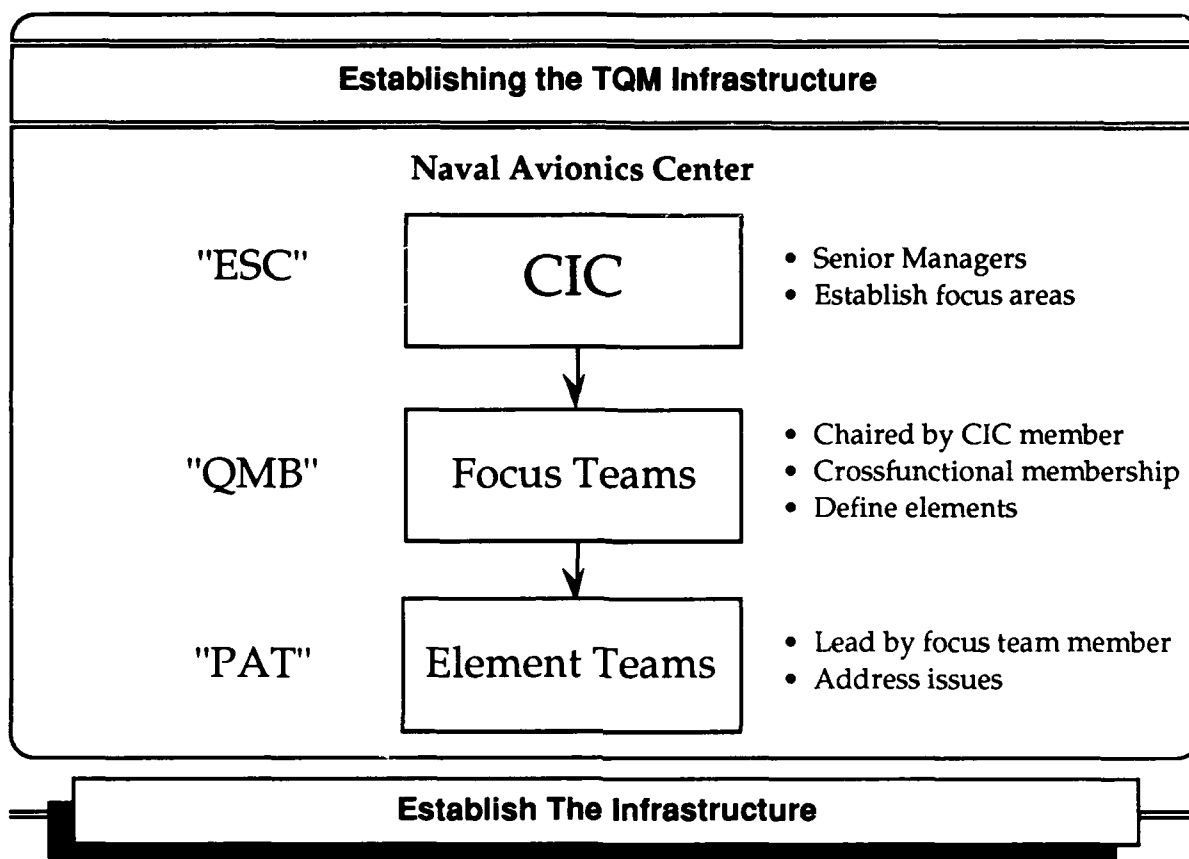
The Naval Avionics Center began at the top to develop their vision and values. The Executive Council met off-site to develop the vision and values. Unable to decide on minor details, the Commanding Officer and Executive Director took charge to develop the final statements.

The senior managers then formed the Continuous Improvement Council (CIC) to gain understanding and agreement on Deming's 14 points. After meeting weekly for four hours for a number of months, the CIC met off site for two days to gain consensus on how to apply Demings 14 points. At this meeting the CIC determined that constancy of purpose was the same as strategic planning. The CIC established eight focus areas:

- Products and Services
- Manufacturing Excellence
- Culture
- People

- Measurement
- Technology
- Business Operation
- Customers

- The CIC then addressed a structure to cascade the vision down throughout the organization. Eight focus teams were established, with cross-functional membership. A CIC member chairs each focus team. The focus teams define elements with in the area. Focus team members then lead element teams to address each of the issues (elements).

- The purpose of the teams is to look at organizational issues relating to the focus/element areas, and investigate:

  - Where NAC is today?
  - Analyze the needs for the future
  - Propose how to achieve

  This proposal becomes the strategic objectives.

- The cross-functional team membership has:

  - Increased corporate knowledge/perspective among employees
  - Promoted teamwork
  - Broken down barriers between departments.

TQM

TQM TOTAL QUALITY MANAGEMENT

In Summary

- Executive Steering Committees identify and **prioritize** improvement issue areas *(the "why")*

- Quality Management Boards identify improvement **opportunities** *(the "where")*

- Process Action Teams are responsible for specific process problems and resolving issues *(the "how")*

- Shift from a hierarchical structure to customer focused, cross-functional teaming

Establish The Infrastructure

Implementers have responsibility for assisting in the implementation of TQM. They must support the recommendations and decisions of the TQM infrastructure.

MODULE SEVEN

IDENTIFY PROCESS

IMPROVEMENT OPPORTUNITIES

Identify Process Improvement Opportunities

Module Seven Objectives

Upon completion of this module, the participant will be able to:

- Identify criteria for selecting TQM implementation projects

- Understand the importance of systematic procedures for generating improvements

- Identify actions necessary for establishing a system for identifying improvement opportunities

- Identify tools and techniques used in process improvements

- Explain the importance of developing a clear problem statement

- Write a properly structured problem statement.

Identify Process Improvement Opportunities

As a foundation for continuous improvements in a TQM environment, the organization must embark upon a continuing search for improvement opportunities. This fundamental TQM process provides a basis for initiating and developing organizational momentum in improvements and employee involvement. A systematic process, for identifying and evaluating opportunities and communicating timely feedback to the individuals who develop an idea or identify a problem has to be initiated early in TQM implementation.

The Implementer's Role

- Drawing out individual workers' motivation

- Bringing together process players

- Analyzing the input from individuals and teams to determine viewpoints

- Clarifying improvement opportunities by writing problem statements

Identify Process Improvement Opportunities

Identify Process Improvement Opportunities

The most knowledgeable person about a job is usually the person doing it! The organization must effectively use each person's knowledge about the organization and their job to improve the way things get done. This does not occur routinely in today's large organizations.

Very often people doing the job are frustrated and cynical because they have not been given the opportunity to make changes that they know should be made to make things work better. A good portion of this frustration results from job classifications that are so narrowly defined that the people doing them derive little or no satisfaction from their jobs.

Participant Exercise

Card Coordination Corporation (CCC)

Vision Statement

The Corporation is dedicated to provide our customers with only quality
card sets and to continuously improve our processes to stay competitive.
CCC is also dedicated to the development and well-being of our employees.

Identify Process Improvement Opportunities

GROUP EXERCISE/CLASS DISCUSSION:

The materials for this exercise will be given to you during the class.

Participant Exercise

In the space below, document the recurring problems in the process of the Card Coordination Company (CCC). This information will help identify areas for process improvements.

Developing Criteria

- Define each selected criteria

- Rank the criteria

- Rate the items

- Develop project selection matrix

Identify Process Improvement Opportunities

Each organization must develop a method for prioritizing ideas and problems as a basis for selecting those opportunities with the most significant potential for improvement to be addressed. This method consists of establishing criteria in order to judge and compare identified opportunities. The criteria should be tailored to the needs of the organization and should be reviewed and established by the ESC. Examples of criteria used for evaluating projects in existing organizations include:

- Customer impact
- Cost impact on current process
- Potential for improvement
- Degree of organizational impact (systemic visibility)
- Complexity
- Functional or cross-functional.

For each criterion, a ranking scale is developed which allows comparison among identified opportunities. Examples of scales used to assess each criterion may include:
- Numerical rankings (1-5, 1-10, 1-3, etc.)
- Categorical rankings (e.g., high, medium, low impact)
- Yes-No statements
- Estimated values from analytical techniques (e.g., dollar values from cost estimation)

Each criterion is ranked in relation to the other criteria identified to develop a method for weighting criteria to arrive at decisions for action. Once the criteria and rankings are established, forms may be developed for comparing and ranking identified opportunities. These forms will serve as the project selection matrix. Criteria for ranking projects, and as a result, the project selection matrices may differ at different organizational levels. An example of a project selection matrix is shown on the next page.

SAMPLE PROJECT SELECTION MATRIX
(SCALE: 1-LOW 5-HIGH)

Project	Level of Visibility (1-5)	Cross-Functional (Y/N)	Employee/ Management Participation (Y/N)	Customer Impact (1-5)	Cost of Poor Quality (1-5)	Potential for Improvement (1-5)	Score
Increase Use of Electronic Mail	5	Y	Y	5	5	5	20
Reduce Meeting Times	4	Y	Y	4	5	5	18

Developing Criteria

Tools and Techniques

- Cost-Benefit Analysis

- Stakeholder Analysis

Identify Process Improvement Opportunities

Decisions about which organizational opportunities to pursue are most critical early in the TQM implementation process. If projects are too large and require years to address, significant improvements may not become apparent and early enthusiasm and/or commitment may wane. On the other hand, if projects are undertaken which are not broadly visible, organization members again may be unaware of important quality activities. Techniques are available which can assist decision makers in identifying appropriate opportunities to pursue.

The project selection matrix provides a tool for ranking the opportunities to identify those with the greatest potential for improvement. However, in some cases, the matrix may not show decision makers the detail required to select among several high-priority projects with apparently significant opportunities for improvements. Additional techniques which may be used to further refine and assess opportunities include:

- <u>Cost-benefit analysis</u>: Addresses the monetary value of the various costs and benefits of an activity. Costs and benefits are carefully identified and a ratio is developed which illustrates the value of the benefits associated with an activity compared to the cost of the activity. The effects on customers and suppliers should be considered in the cost-benefit analysis. This kind of analysis must be structured differently from the traditional "cost effectiveness" concept which is based on marginal analysis assumptions. Cost-benefit analysis stresses value-added activity as it relates to output that meets customer needs. By necessity, the cost of meeting the customer's needs has to be considered, but only after the significance of the value-added activity is fully considered. It is important to know that the TQM approach, with the emphasis on process, has shown that attention to value-added activity frequently results in significant improvements without significant costs.

- <u>Stakeholder analysis</u>: Identifies the organizational structures and individuals who may gain from a change which addresses a problem and those who may resist change due to current organizational structures and positions.

Following these analyses when required, the QMB or other decision makers will have a broader and more detailed understanding of the opportunities among potential projects.

Selection of organizational projects is a major responsibility of the QMB. Project decisions and action on other identified opportunities should be based on the best facts available using the tools and analytic techniques which your organization has embraced. Once these decisions are made, the Process Action Team takes responsibility for ensuring that the organization's best efforts are realized.

The implementer's role in this process is to support the criteria and explain why priority is established in certain areas. The implementer must also serve as a go-between once the activity resulting from ESC and QMB decisions begins to be felt in the traditional organizational structure.

Systems and Procedures

- Screening Committee review

- Formal search for opportunities/suggestion system

- Direct ESC/QMB solicitation

- Other avenues for generating ideas (group meetings, quality presentations, quality circles, etc.)

Identify Process Improvement Opportunities

Your organization should establish a formal process for systematically and continuously identifying opportunities for improvement. The roles and responsibilities of the ESC and QMB process should be carefully defined and communicated to each employee. How this is managed and perceived by employees will go a long way towards making improvement suggestions part of the organization's culture. The most important guideline is that there are no guidelines, restrictions, or limitations. Any and all improvement suggestions will be accepted. They shouldn't be required in writing – an audio or video tape submission would be acceptable. It isn't the medium that is important; it is the quality of the suggestion that is important.

Procedures for providing timely feedback to employees and teams regarding action on their ideas or problems should also be included in this formal structure.

Above all else, the system must be simple and responsive. If complex procedures are needed to suggest change they will become an obstacle to change. If the system is not responsive employees will lose faith in the charge process.

A Screening Committee is usually established to review all ideas and problems identified, to ensure that timely decisions are made on each idea or problem, and to provide timely feedback to the source of the idea or problem proposed regarding the action to be taken. Implementers have a definite role to play in ensuring this responsiveness. This role includes pushing for the resources necessary to make the system responsive. Properly done, it won't be long before the investment pays off many times over.

The Screening Committee is usually a subcommittee of the ESC or QMB and functions in an advisory capacity to the appropriate group. Sometimes, the organization may choose to establish the Screening Committee with representatives from all levels of the organization. Caution is in order however, because too much structure prevents responsiveness.

A formal system of procedures for soliciting, analyzing and making decisions regarding opportunities for improvement or organizational problems is an important element in the TQM process. As mentioned earlier, this system is one of the most visible indicators to employees of management's TQM intent. In many well-recognized TQM organizations, the system for soliciting ideas and problems is considered a keystone in their TQM efforts. Emphasis has to be put on the quality and implementation rates for suggestions. Do not use such measures as number of suggestions per employees.

In DOD, the traditional suggestion system has not generated high levels of participation. The implementer must work to promote an open channel for communicating improvement opportunities. Implementers should identify themselves as a focal point helper for improvement suggestions and should act on the suggestions as soon as possible.

At each level in the organization, natural work groups or teams have many opportunities for generating ideas or identifying problems which may provide significant opportunities for organizational improvement. A method should be established for systematically capturing ideas generated in work group meetings, quality presentations and discussions, quality circles and in other forums in which ideas may be generated.

Tools and Techniques

- Brainstorming
- Interviews
- Sampling
- Survey and Questionnaire

- Cause and Effect Diagrams
- Work flow Diagrams
- Check Sheets
- Cost Estimation

Identify Process Improvement Opportunities

To support the system and procedures established to organizationally identify opportunities for improvement, there are many classical management techniques and analytical tools. These include the following:

- **Brainstorming**: A technique for developing ideas in groups focusing on generating and developing ideas by withholding evaluation of initial ideas.

- **Interview**: Planned face-to-face questioning of individuals and/or groups. Interviews take a lot of time, so sampling procedures should be used to acquire representative data.

- **Sampling**: A statistical method in which a subset of a population is selected to provide population information, show progress or identify problems.

- **Survey and Questionnaire**: Prepared written questionnaires designed to solicit specific desired information.

Tools and Techniques

- <u>Cause and Effect Diagrams</u>: An analytical tool used to analyze complex interactions, identify specific potential causes of a problem, and generate potential solutions to a problem.

- <u>Work flow Diagrams</u>: An analytical tool used to identify relationship of cause and effect to an identified problem or result.

- <u>Check Sheets</u>: A tracking tool used to assess a process in relation to one or several carefully defined variables (e.g., time, types of errors, etc.)

- <u>Cost Estimation</u>: An analytical technique used to determine the dollar impact of problems and solutions.

Tools and Techniques
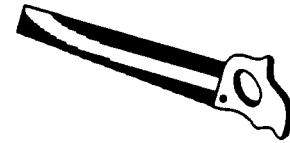
- Pareto Diagram
- Histogram
- Run Charts

- Control Charts
- Scatter Diagram

Identify Process Improvement Opportunities

Specific techniques for analyzing and prioritizing ideas and problems include:

- Pareto analysis/diagrams
  - prioritize problems
  - analyze different groupings of data
  - measure the impact of changes
  - break down broad causes into subcauses

- Histograms
  - reveals the amount and distribution of variation within a process

- Scatter diagrams
  - used to study the relationship between two variables
  - tests for possible cause and effect relationships

- Run charts
  - illustrates trends over time
  - understand the basic characteristics of a process
  - focus attention on truly vital changes in the system

- Control charts
  - determine sources of variation (common and special causes)
  - determine control/stability of system.

The implementer should have a general working knowledge of these tools and techniques and encourage individuals and teams to use them.

The Problem Statement

- Requires clarity and objectivity

- Describes in specific, concrete terms what is wrong

- States the effect of the problem

- *Focuses on how people are affected*

- Measurable

- Specific

- Positive

Identify Process Improvement Opportunities

A clear statement of the opportunity for improvement or problem to be addressed is an essential prerequisite for identifying appropriate solutions and evaluating the effect and benefits of addressing the opportunity or problem. Problem statements must be clear and objective. Well-written problem statements will:

- State <u>what</u> is wrong (the effect)
- Identify <u>how</u> people are affected
- Identify how often, how much, when (measurable)
- Use specific, concrete terms
- State in positive terms (not <u>lack of</u>).

The ability of organization members to state opportunities and problems clearly provides a foundation for all subsequent work in analysis and helps in developing potential solutions. Skill in accurate problem statements has great leverage in defining and directing organizational improvements. Formats for submission of opportunities/suggestions should provide guidance on developing good problem statements.

INDIVIDUAL EXERCISE:

Develop a problem statement from the scenario below.

There is a problem with incoming phone calls. People call to speak to someone and don't know their extension numbers or don't know who (i.e., what department) they need to speak with. The secretaries are having difficulties taking accurate messages. People are often away from their desks and don't remember to forward their phones. Phone messages are not being received and phone calls are not getting returned. Employees, and the people calling in, get mad because of the "lousy" system. People calling in want one (or more) of three things: request information, give information, or personal calls. Some of the calls demand immediate action.

Correct problem statement:

Guidelines for Problem Statements

Predetermined solutions avoided - don't suggest the solution in the statement

People not to blame - so don't assume it

Everyone understood the problem - clear writing, several reviewers

Identify measures of merit

Within sphere of influence - control scope of problem initially to the area under your influence.

The Problem Statement

Remember, as stated on page 7-17, the problem statement should:

- State what is wrong (the effect)
- Identify how people are affected
- Identify how often, how much, when (measurable)
- Use specific, concrete terms
- State in positive terms (not lack of).

In Summary

- Innovation can be encouraged; it cannot be mandated.

- Implementers have to help the system install improvements.

- Implementers must help individuals and teams convert their ideas into reality.

Identify Process Improvement Opportunities

If employees identify with their jobs and find them challenging, they will be enthusiastic about contributing their ideas about process improvements. The implementer must devote time to talking with employees about processes which need improvement.

MODULE EIGHT

IMPLEMENT PROCESS ACTION

TEAM RECOMMENDATIONS

Implement PAT Recommendations

Module Eight Objectives

Upon completion of this module, the participant will be able to:

• Identify the roles and responsibilities of the implementer in carrying out the implementation plan

• Identify the components of an action plan for implementing PAT recommendations

• Develop a plan to prepare for implementation efforts.

Implement PAT Recommendations

This module presents material that gives guidelines to prepare TQM implementation action plans. It is important to understand that while the implementer may not be directly involved in PAT and QMB actions, it is the implementer's responsibility to be informed about these actions to successfully put into effect the decisions of the TQM infrastructure.

In the previous module, we discussed strategies for identifying and prioritizing process improvement opportunities. In this module, implementers will gain an understanding of their role in working with a QMB and /or PAT to ensure that a valid implementation plan is written and put into action.

The Implementer's Role

You are responsible for assisting PATs/QMBs develop and present the implementation plan to management. You should:

• Provide information about availability of resources

• Provide information about the parties that should be contacted and their roles in the implementation effort

• Help to identify and overcome barriers.

Implement PAT Recommendations

Implement PAT Recommendations

The implementer is responsible for assisting in the actual implementation of the process improvement plan. The implementer assists by:

• Providing information about available resources

• Supporting members of PATs, QMBs, and management in disseminating information about the plan

• Identifying obstacles to successful process improvement implementation and developing strategies to overcome them.

The process improvement plan is a written document that outlines the steps that will be taken to improve the process. The plan addresses how the changes will be accomplished, by whom, when, and the resources needed for the improvements to work.

Development of the Plan

Steps in the development process:

- Develop PAT recommendations into an implementation plan

- Prepare offices in your functional area for the implementation

Steps in the implementation process:

- Implement the plan

- Track and monitor implementation efforts.

Implement PAT Recommendations

There are several basic steps in developing the implementation plan. The
implementer works with the PAT and/or QMB to ensure that the following steps
are accomplished:

1.   *Develop PAT recommendations into an implementation plan:*

      Since PATs have already identified areas that need process
      improvements, the implementer must work with the QMB and/or PAT to
      develop the action plan.

This plan should include the following information:

- specific process actions that will be changed
- the parties that are involved in these process changes and their roles and responsibilities
- the resources that are required in order for the process improvement to be successful
- time-frames involved
- the methods by which improvements will be documented (and the parties responsible for this)
- the criteria for determining level of success from measurements taken
- the follow-up actions necessary to sustain the improvement.

The action plan should specify the who, what, where, when, why, how of the process improvement (s). You, as an implementer, need to ensure that these components are in the implementation plan.

2.   *Prepare offices in your functional area for the implementation:*

Present briefings and conduct process training to ensure understanding of the new procedures.

- Give as much information as possible in the beginning and provide ample opportunities to ask questions.

- Do communication testing! What do they want to hear? Knowledge workers can't be too informed in related areas.

3.   *Implement the plan:*

The implementer works with the PAT, managers, and staff in the following actions specified in the plan. It is necessary that each component of the plan be implemented as scheduled in the plan. Provisions for handling change should also be included in the plan.

- Emphasize reasons and needs. Let the situation establish its own authority.

- Establish clear accountability and encourage group activity.

4.   *Track and monitor implementation efforts.*

The following pages contain a brief summary of an actual process improvement study that was conducted by an OSD PAT. The purpose of the case study is to give you a chance to take the recommendations of an actual PAT and connect it into an action plan for implementation.

As an implementer, it is not your role to study all the information the PAT reviewed to study the process. Rather, your role is to support PAT recommendations and provide assistance to ensure the action plan is completed and acted on by the whole organization.

Because your role is not to review all the data, only some of the background information from the case study is provided in the following pages. Furthermore, as a member of a TQM organization, it is important to remember that employees must work together, trust each other, and support one another. Implementers should work with PAT members in understanding PAT recommendations and developing the implementation plan. Equally important is to make provisions for involving PAT members as necessary to assist in day-to-day application of improvement actions.

Case Study

THE PROBLEM

The correspondence process throughout your organization is not
meeting customer requirements. There is a tremendous amount
of correspondence that must be reworked. These cycles of
rework result in employee, customer, and supplier frustration.

Implement PAT Recommendations

A QMB has determined that the correspondence process needs to be
investigated and improved. Your role, as the implementer, is to support the
implementation of the recommendations.

The next section contains the information the PAT had when studying the
process of correspondence. Based on this data, the PAT made eight process
improvement recommendations.

After reviewing the data and the PAT recommendations, identify the specific
actions you will need to take in order to support the successful implementation of
process improvements. Refer to the four steps the implementer should take to
support PAT recommendations (see pages 8-4 through 8-5).

Case Study

Getting the Policy Package Through

(SECDEF)

(USD (X))

(Office B)

(Office C)

(Office D)

(Office E)

(Office F)

Suspensed Correspondence

Implement PAT Recommendations

FUNCTIONS OF OFFICES:

SECDEF: Signature

UNDERSEC
OF DEFENSE: Approves Package

Office B: Cross Functional Review

Office C: Cross Functional Review

Office D: Cross Functional Review

Office E: Cross Functional Review

Office F: Signature

The goal of this correspondence process is to get the Secretary of Defense to sign a policy statement. The policy package must be developed and coordinated as indicated. A typical pattern is displayed on the left.

Case Study

Typical Breakout of OSD Activity for Suspensed Correspondence

No Action Required 34%

Completed 5%

Extension Filed 35%

Correspondence Transferred 26%

Implement PAT Recommendations

This pie chart depicts the percentage of correspondence that falls into each area.

Note that only 5% of correspondence is completed without some alteration of the original intent, e.g., :

- action was specified, but not really required
- action was sent to wrong function
- action needed more time than was originally allowed.

TQM TOTAL QUALITY MANAGEMENT

Implementers Workshop

Case Study

Average Time Overdue by Category

Deadlines
Amuse
Me!

Function A
Function B
Function C
Function D
Function E
Function F

0   10   20   30   40   50

Days Overdue for Outstanding Actions
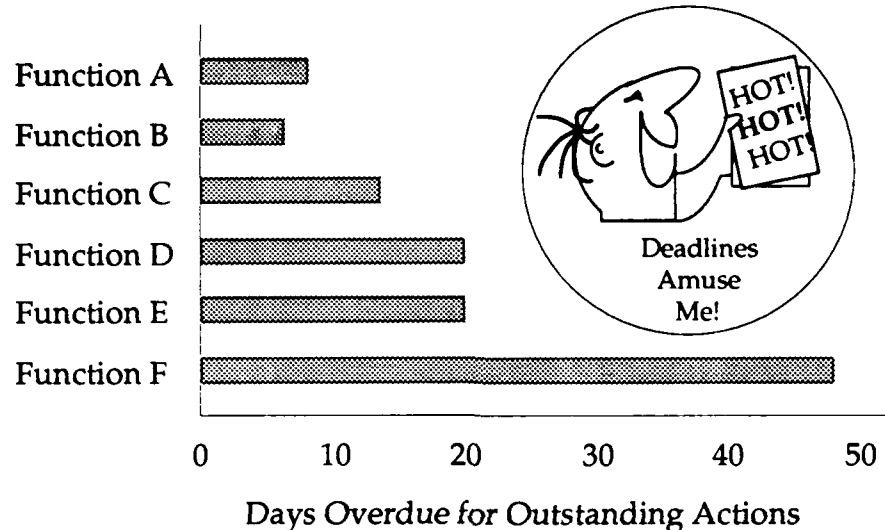
Implement PAT Recommendations

The graphic depicts the average number of days correspondence is overdue by functional area. Note that none of the functional areas completed correspondence by the required suspense time.

In short, there is a problem with the process!

Case Study

Percent Overdue by Category

Function A

Function B

Function C

Function D

Function E

Function F

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 |

Percent Overdue for Completed Actions
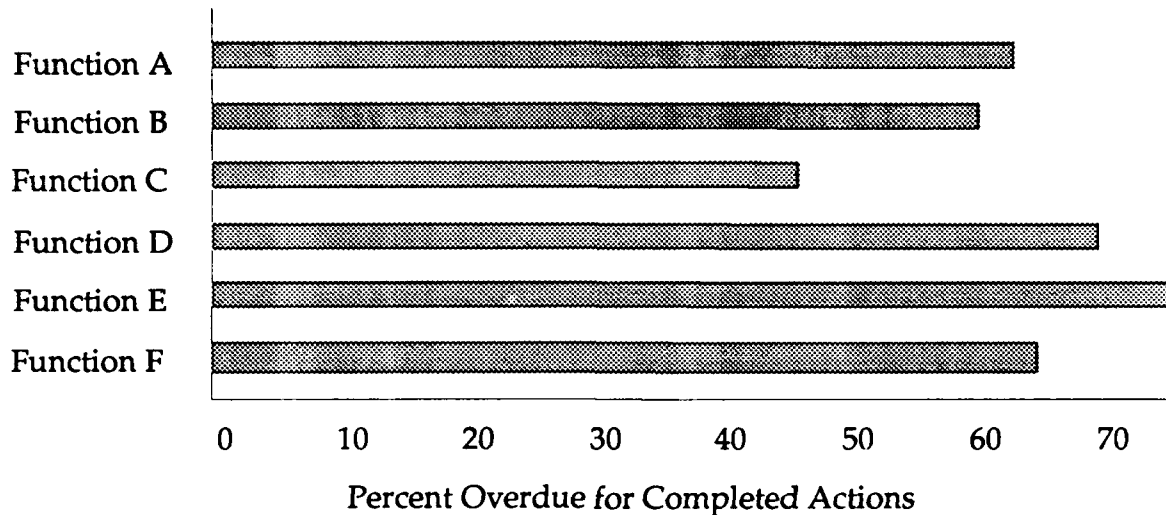
Implement PAT Recommendations

The data is presented in a slightly different manner in this graphic. It is expressed in terms of percentage of correspondence overdue by office.

The data suggest that there is a major problem with the process of handling suspended correspondence.

An OSD Process Action Team was assigned to study the problem and to suggest improvements.

Listed below are the recommendations from the PAT.

- Develop uniform criteria for review (e.g., reduce variance among reviewers).
- Increase management awareness of work priorities, resource allocation and what it takes to do the job.
- Manage changes induced by executive personal preferences.
- Reduce transfers and response time through smarter initial assignment.
- Provide more intense and standardized training to newly assigned personnel.

INSTRUCTIONS:

Participants break into groups. Each group will work with one recommendation and outline the actions necessary to support the following activities:

- Develop the PAT recommendations into a process improvement action plan

- Identify barriers that may interfere with successful implementation and develop strategies to eliminate them.

A worksheet is provided for each recommendation.

Be prepared to discuss your results with the class.

DEVELOP UNIFORM CRITERIA FOR REVIEW (e.g., reduce variance among reviewers).

Develop PAT recommendations into a process improvement action plan

-

-

-

-

Prepare offices in your functional area for the implementation

-
-
-

Implement the plan

-

-

-

INCREASE MANAGEMENT AWARENESS OF WORK PRIORITIES, RESOURCE ALLOCATION AND WHAT IT TAKES TO DO THE JOB.

Develop PAT recommendations into a process improvement action plan

-

-

-

-

Prepare offices in your functional area for the implementation

-
-
-

Implement the plan

-

-

-

MANAGE CHANGES INDUCED BY EXECUTIVE PERSONAL PREFERENCES.

Develop PAT recommendations into a process improvement action plan

-
-
-
-

Prepare offices in your functional area for the implementation

-
-
-

Implement the plan

-
-
-

REDUCE TRANSFERS AND RESPONSE TIME THROUGH SMARTER INITIAL ASSIGNMENT.

Develop PAT recommendations into a process improvement action plan

-

-

-

-

Prepare offices in your functional area for the implementation

-
-
-

Implement the plan

-

-

-

**PROVIDE MORE INTENSE AND STANDARDIZED TRAINING TO NEWLY
ASSIGNED PERSONNEL.**

Develop PAT recommendations into a process improvement action plan

-

-

-

-

Prepare offices in your functional area for the implementation

-
-
-

Implement the plan

-

-

-

In Summary

The following areas have been discussed in this module:

- Roles and responsibilities of the implementer in carrying out process improvement implementation efforts

- Components of an action plan for implementing PAT recommendations

- Preparing for implementation efforts.

Implement PAT Recommendations

This module has described the implementer's responsibilities in the actual implementation of PAT recommendations. The next module, Evaluate and Recycle, describes the next step in the implementation process--evaluation of implementation efforts. Also included is a discussion of the importance of recycling lessons learned throughout the organizational unit (and the organization) in order to *continuously improve.*

MODULE NINE

EVALUATE AND RECYCLE

Evaluate and Recycle

Module Nine Objectives

Upon completion of this module, the participant will be able to:

• State the implementer's role in evaluating and recycling process improvement efforts

• Identify the four levels at which TQM evaluation may be done and state appropriate indicators

• Describe the role of recycling in the TQM process

• Identify approaches which contribute to continuous improvement and recycling.

Evaluate and Recycle

This module presents evaluating and recycling as important elements in the TQM process. Responsibility for formal TQM evaluation and recycling resides in the ESC and QMBs. However, the implementer should understand the processes and participate informally and formally, when necessary. This module discusses four levels of TQM evaluation and the implementer's role in each. Recycling is the process which ensures continuous and sustained improvements.

The participant is introduced to the concepts and approaches which may be used daily to ensure continuous improvement.

The Implementer's Role

- Develop and communicate approaches which may assist in evaluation and recycling

- Communicate with those responsible for evaluation and recycling on ESC and QMB

- Support ESC and QMB evaluation and recycling efforts

- Assess progress and pro-actively contribute to identifying improvement opportunities

- Identify organizational goals not being met at the lower levels

- Look for unbalanced priorities in cross-functional actions.

Evaluate and Recycle

As a TQM implementer, your formal role in TQM evaluation and recycling is limited. The ESC and QMB members have direct responsibilities in these areas. Nevertheless, as TQM is about responsibility and accountability at all levels in the organization, the implementer can play a significant role informally in evaluation and recycling. Continuous and sustained improvements require careful attention. The implementer can contribute to ensuring continued progress and improvement through an informal role in evaluation and recycling. These informal roles may include:

- Developing and communicating monitoring approaches to ESC and QMBs
- Identifying opportunities for improving evaluation and recycling processes
- Supporting ESC and QMB evaluation and recycling initiatives
- Assessing progress and pro-actively contributing to identifying improvement opportunities
- Identifying organizational goals not being met at the lower levels
- Looking for unbalanced priorities in cross-functional actions.

Levels of TQM Evaluation

Four Evaluation Areas

- Overall organizational TQM processes

- Work processes

- Quality projects

- Team effectiveness
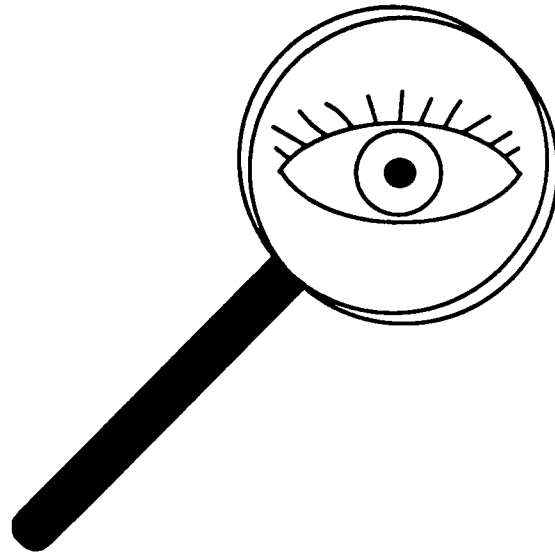
Evaluate and Recycle

The TQM process changes the culture of the organization in many dimensions and at all levels. These four areas may be used in evaluating how well TQM is progressing throughout the organization.

Vision, philosophy, effectiveness of ESCs, QMBs and other structures, and supporting organizational systems are considered. For work processes and quality projects, improvements related to goals and measures are assessed. Team effectiveness can be assessed at all organizational levels. Additionally, how problems or opportunities are identified and selected is also an important evaluation parameter.

In all the above evaluation areas, the implementer's role is one of making quantitative as well as qualitative assessments and taking actions to keep the emphasis on TQM improvements.

Levels of TQM Evaluation
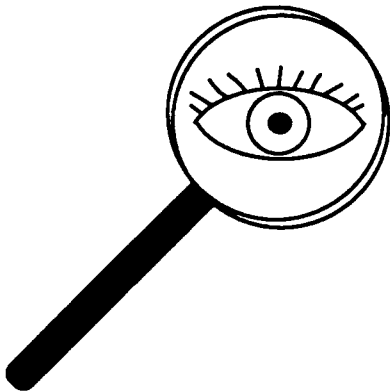
Organizational TQM Processes

- Customer satisfaction
- Management system
- Analysis and use of data for decision making
- Quality planning process
- Employee involvement
- Quality education and training
- Use of process measures
- Quality of products

Evaluate and Recycle

At the organizational level, TQM implementation may be evaluated in relation to the elements of quality management described earlier in the course. Specific factors which should be considered include:

- Increased customer satisfaction resulting from a dedicated focus on identifying and meeting customer requirements and increased attention to customer relationships.

- ESC, QMBs, and PATs management systems with clearly defined objectives for customer satisfaction and quality improvement.

- Data-based decision making based on customer needs, criteria for suppliers, and service emphasis.

- Quality planning process that relates quality planning to overall business planning and also includes commitment of resources to quality.

- Employee involvement and flexibility to act and recommend innovation.

Levels of TQM Evaluation

- Quality education and training for all employee categories, including TQM tools and their application. The program is designed on formal assessments of needs.

- Use of process measures for managing organizational processes.

- Verifiable improvements in quality of products and services which are based on customer needs.

One of the main roles of the implementer in all of the above activities is to look for unbalanced priorities in cross-functional areas and to assist process improvements so that the whole organization progresses towards a TQM culture.

Levels of TQM Evaluation

Work Processes And Quality Projects

- Relation to customer needs
- Process measures available and used consistently
- Documented improvements in process or work capabilities
- Documentation of processes for "knowledge preservation"
- Quality assurance processes

Evaluate and Recycle

In assessing work processes and quality projects, several areas are considered essential for ensuring quality improvements:

- On-going and projected work should all show a clear relationship to customer needs as defined through working directly with customers.

- Use of process and other measures for documenting performance.

- Documentation procedures which ensure that job aids, policy directions and cross-functional relations are clearly spelled out.

- Quality assurance procedures which address internal standards and quality improvements as well as relationships with suppliers and supplier product quality and quality processes.

Levels of TQM Evaluation

The implementer's role in evaluating work processes and quality projects varies in relation to his position and the project or process. For those projects or processes for which he/she is responsible, the implementer will have an integral role in ensuring that they are continuously assessed and periodically formally evaluated. In those cases, the implementer needs to become intimately familiar with the expectations and criteria used in the formal evaluation process and to ensure that he/she takes action to address potential or real deficiencies.

Levels of TQM Evaluation

How to Evaluate Team Effectiveness

A team can be assessed in relation to its achievements of group
goals, innovations developed and implemented, and documented
improvements resulting from team activity.

Evaluate and Recycle

Work and/or project teams are used to address opportunities and problems in a
TQM organization. Team effectiveness is the principal factor in making
improvements possible in a process or the organization. Teams may be evaluated
in relation to group dynamics and to quality and productivity. Group dynamics are
influenced positively when the team has established:

* Goal definition and acceptance
* Direct and clear communication
* Procedures for making decisions and moving forward
* Balanced participation among all team members
* Ground rules related to behaviors and norms.

Levels of TQM Evaluation

Again the implementer's role in evaluation is related to his/her role in supporting the team's efforts. The implementer has to make every effort to track the effectiveness of team recommendations. It is especially important that the implementer understand how the team arrived at their recommendations: the measurements that were taken and how the recommendations were related to the problems they were intended to solve. This is the only way the implementer can carry forward the recommendations of the TQM infrastructure.

It is important to point out that evaluation of team effectiveness is not "evaluation" in the classical sense of a DOD Inspector General or the General Accounting Office. Team effectiveness is evaluated on a continuous basis with coaching and supporting as the principal role of the implementer. This type of evaluation emphasizes participation and involvement and minimizes reports and retribution.

Evaluation

Monitoring Techniques

- Check sheets

- Histograms

- Run charts

- Control charts

Evaluate and Recycle

A variety of techniques have been developed and are used to support work in a TQM environment. Many of these techniques and how they may be used are briefly described in this course. Four techniques are typically used for monitoring work processes or project improvements. These are the same tools used to discover where problems exist.

- Check sheets are structured forms that are locally designed to record and analyze data. Data from individual check sheets are then aggregated to identify problems and show patterns.

- Histograms are used to show distribution of measured values by frequency of value. Change can be identified by comparing the frequencies of measured data over time.

- Run charts are used to track a specified measure over time.

- Control charts are run charts which indicate the range of variation built into the system. Control charts help distinguish between systemic variation

These techniques are useful for monitoring and evaluating quality and process status and improvements. However, to quote Dr. Deming, "the most important figures are not on the chart... (they) are unknown or unknowable". These include other results from quality improvements such as more effective use of time, and better customer service.

The implementer may choose to use one or more of these monitoring techniques in his work or quality improvement efforts, if appropriate.

GROUP EXERCISE:

The statements on the following pages are the same recommendations presented in Module 8. Participants break into the same groups to work on one recommendation to define the activities implementers will undertake to support evaluating and recycling activities. Be prepared to present your results to the class.

DEVELOP UNIFORM CRITERIA FOR REVIEW (e.g., reduce variance among reviewers).

How would you identify customer satisfaction?

What means would you use to identify levels of employee involvement?

How would you evaluate training effectiveness?

INCREASE MANAGEMENT AWARENESS OF WORK PRIORITIES, RESOURCE ALLOCATION AND WHAT IT TAKES TO DO THE JOB.

How would you identify customer satisfaction?

What means would you use to identify levels of employee involvement?

How would you evaluate training effectiveness?

MANAGE CHANGES INDUCED BY EXECUTIVE PERSONAL PREFERENCES.

How would you identify customer satisfaction?

What means would you use to identify levels of employee involvement?

How would you evaluate training effectiveness?

REDUCE TRANSFERS AND RESPONSE TIME THROUGH SMARTER INITIAL ASSIGNMENT.

How would you identify customer satisfaction?

What means would you use to identify levels of employee involvement?

How would you evaluate training effectiveness?

PROVIDE MORE INTENSE AND STANDARDIZED TRAINING TO NEWLY ASSIGNED PERSONNEL.

How would you identify customer satisfaction?

What means would you use to identify levels of employee involvement?

How would you evaluate training effectiveness?

TOTAL QUALITY
MANAGEMENT   Implementers Workshop

Recycling

TQM

- A journey, not a destination

- Requires constant attention

- Continuously evolves

- A way of life

Evaluate and Recycle

Recycling is the process through which improvements become institutionalized and the TQM effort rejuvenated. Ensuring continuous improvement requires sustained attention among all employees.

The recycling process is a method for ensuring continuity of effort. TQM is a continuous journey requiring the continuing ideas and efforts of every individual. The process needs management direction to ensure that gains are not lost. Some organizations establish annual themes to refocus and rejuvenate TQM commitment at all levels.

The continuous evolution of TQM approaches to increasingly deeper organizational levels of activity is a continuing outcome of the TQM journey.

Recycling

Continuous Improvement Requirements

The implementer should recognize this shifting pattern of improvement and consolidation and the necessity for disciplined action at all levels to ensure TQM improvement is sustained.

Improve   Entrench   Improve   Entrench   Improve   Entrench
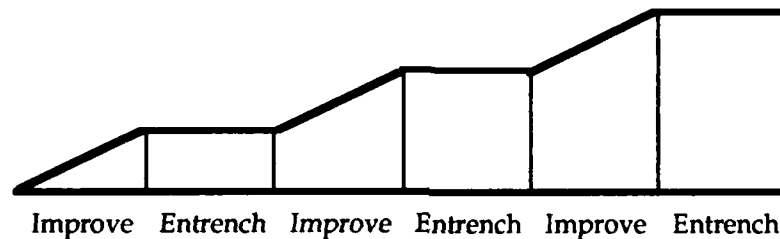
Evaluate and Recycle

Continuous improvement through TQM requires organizational and individual commitment over time. The TQM elements of top management leadership and employee involvement at all levels are the mechanisms for generating commitment. In conjunction with commitment is disciplined action at all levels. Ensuring sustained TQM effort requires the consistent application of the Plan, Do, Check, Act (PDCA) cycle to all activities.

Organizational improvements will be institutionalized through alternating periods of improvement and consolidation. When significant improvements have been realized there will be some time of consolidation required for the organization members and systems to adapt to and understand the change in relation to the existing situation. This organizational consolidation of improvements will provide the foundation for further "breakthrough" and incremental improvements.

In Summary

- Evaluation

  - Clear measures of merit
  - Consistent measurement

- Recycle

  - Consolidate the gains
  - Reinforce them

Evaluate and Recycle

The implementer plays a central role in evaluation and recycle efforts. The implementer is the "super glue" for consolidating the improvements and sustaining them. After this, the implementer works to create readiness in the organization for the next improvement.

MODULE TEN

TRAINING

Training

Module Ten Objectives

Upon completion of this module, the participant will be able to:

• Assist the Training/Quality office in developing the guidelines for a needs assessment

• Identify the types of training courses necessary for a TQM transformation

• Discuss the criticality of training to implementation success.

Training

Implementation of TQM and the education and training of the entire workforce are inseparable processes. A comprehensive educational program includes a continuing cycle of TQM education and training, and on-the-job application. Education in this context refers to knowledge and conceptual learning; training refers to those skills and methodologies needed for process improvement. This module discusses the role of the implementer in promoting TQM training.

The Implementer's Role

- Baseline personnel
- Determine priorities
- Set budget
- Schedule training
- Organize team training when possible
- Reinforce training back on job
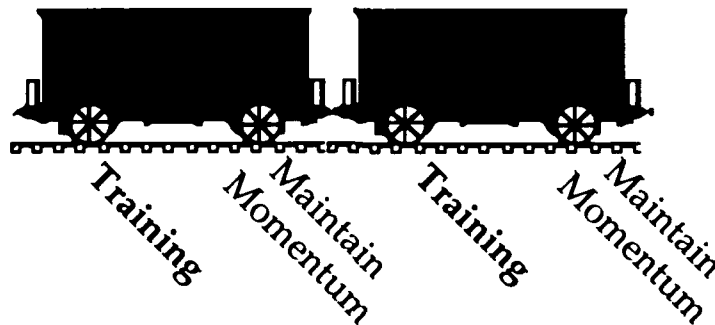
Training

A well developed training program is critical to the success of any implementation effort. Implementers assist training departments/individual managers in identifying :

- **WHO** needs training
- **WHAT** type of training is needed
- **WHEN** training should be given
- **WHERE** training is available.

Needs Assessment

- Provides a roadmap for directing training efforts.

- Helps identify the extent of training needed.

- Helps establish training priorities.

- Must be done on a regular basis.

Training

All managers and employees should receive on-going training to enable them to keep abreast of changing job requirements and prepare for greater responsibilities. A key element of training for all managers and employees is quality awareness and the use of tools, techniques, and technologies to support continuous improvement. The scope, intensity and timing of training depends on such factors as organization level, nature of work, and specific processes under review for improvement.

Training needs to be tailored to specific jobs and organizations and should be determined after an organizational needs assessment is conducted and objectives established. Needs assessment of different subgroups (hierarchical and functional) help to identify specific training requirements and optimal content and delivery methods.

At minimum, an annual needs assessment should be conducted by the training/quality office or training person. From this, a comprehensive training plan should be developed. Management must then develop priorities based on the highest need, and courses should be scheduled accordingly. One of the most significant findings that has come out of research conducted on training in the federal government, is that training is random, unfocused and/or untimely. Managers need to learn how to develop meaningful Individual Development Plans that clearly spell out employee needs in terms of improvement and future development. Implementers need to learn how to apply rigor in assisting in designing, developing and offering training.

CLASS DISCUSSION:

Who in your organization/work unit determines what type of training is needed and by whom? How do you interact with this person now? What is your current interaction with your employees in helping them complete their development plans?

Awareness Training

Everyone in an organization needs to have a basic understanding of what is happening in the organization, in order to reduce anxiety and resistance to change.

Training

Typical <u>management</u> awareness training usually covers major TQM themes and concepts, including:

* The need for cultural change
* Various roadblocks and barriers to change
* Improving performance
* Roles and responsibilities
* Improving quality and productivity
* Quantitative tools and techniques overview.

Awareness Training

Awareness training for <u>employees</u> usually provides a broad overview of TQM concepts, and then specifically addresses topics such as:

* Why are we doing this?
* What's in it for me? My organization?
* What impact will this have on my work?
* When will this happen?

Examples of awareness training provided at two Navy installations are described below:

<u>Norfolk Naval Shipyard</u>

Senior management attended 1/2 day and 2 1/2 day TQM seminars as well as an additional one week seminar.

All supervisors attended a 2 day TQM awareness seminar.

<u>Naval Publications and Forms Center</u>

One third of the workforce trained in quality concepts. All employees are enrolled in a competency based certification system. All Performance Improvement Teams were trained in quality skills and tools.

Other employees received continuous training in quality management and supervision.

<u>Defense Contract Audit Agency</u>

Principles only ESC awareness training.

Awareness Training

Awareness training should follow this path:

```
         Top Management
              │
              ▼
       Middle Management
              │
              ▼
      First Line Supervisors
              │
              ▼
          Employees
```
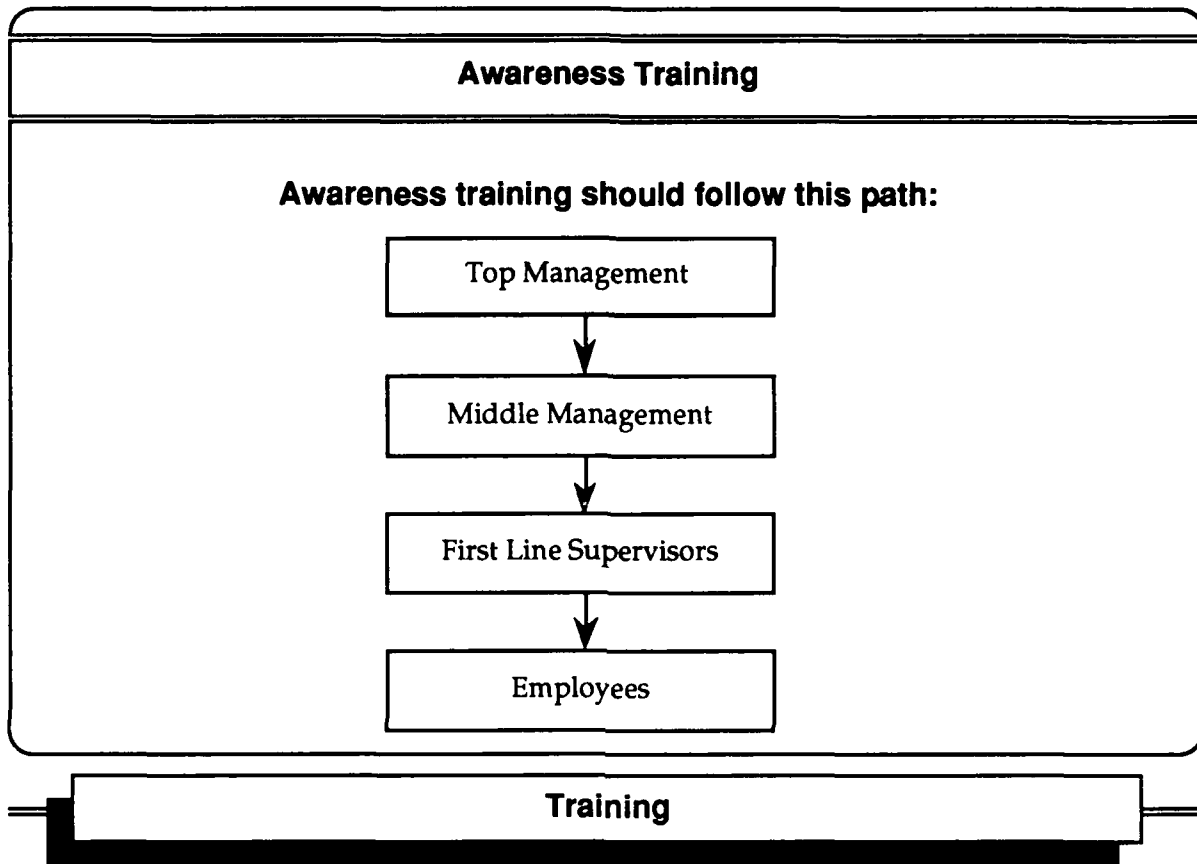
Training

Awareness training should begin with top management, followed by middle management and first line supervisors. Employees usually receive their training from managers after the managers have received training and understand the TQM concepts or from qualified outside consultants.

The implementer has an important role in awareness training. The implementer should become qualified as a presenter for awareness training and give frequent classes to personnel in the implementer's functional areas.

Training these groups need not be sequential; it can be concurrent. However, the training must be tailored to the specific group.

ESC Training

KNOWLEDGE, SKILLS, and ABILITIES

1. Establishing a quality culture.
2. Managing TQM.
3. Statistical thinking.
4. How to make decisions by consensus.
5. Identifying and prioritizing organizational issue areas.
6. Understanding the importance and application of experimental design.
7. How to select projects that have the most significant impact on the organization.
8. How to set up a reward and recognition system that reflects quality principles.
9. Managing change.
10. Establishing a climate that encourages risk taking and innovative thinking.

Training

Members of ESCs will need skills in many areas, some of which will be new. An assessment should be made to determine the extent to which members have the type of knowledge, skill and abilities (KSAs) identified above, and the extent to which training is needed.

ESC members should receive at least the awareness course before they being to operate. During the first meeting, an assessment should be made to determine what kind of initial skills training might be needed. A plan should be developed that specifies the what, when, how and where training will be delivered. Some organizations opt to train ESC members in small one or two hour blocks before or during regularly scheduled meetings.

QMB Training

KNOWLEDGE, SKILLS, and ABILITIES

1. In-depth understanding of TQM concepts, tools and techniques.
2. Analyzing the organization for project selection.
3. Cross-functional management.
4. How to reward and recognize TQM accomplishments.
5. Implementing a quality culture.
6. Statistical Thinking.
7. How to make decisions by consensus.
8. Removing barriers
9. Advocating cultural process change.
10. Working effectively with labor unions.
11. Establishing project and employee selection guidelines.
12. Experimental design.
13. Tracking Effectiveness.

Training

QMB members should receive at least the awareness course before they begin to operate. During the first meeting, an assessment should be conducted to determine what other initial training might be needed. Once some initial deficiencies are noted, a plan should be developed that specifies the who, what , when, how and where training will be delivered. Examples of skills needed for QMB members are identified above. As with ESCs one option is to train QMB members in small one or two hours blocks before or during regularly scheduled meetings.

CLASS DISCUSSION:

How can you go about planning group training activities?

PAT Training

KNOWLEDGE, SKILLS, and ABILITIES

1. The efficacy of working on teams.
2. The benefits to the organization and the individual
3. Agenda setting
4. Meeting management
5. Consensus decision making
6. Brainstorming
7. Pareto Analysis
8. Cause and effect analysis
9. Data collection
10. Flow Charting
11. Effective interviewing techniques
12. Survey techniques
13. Activity analysis
14. Process analysis
15. Problem solving techniques
16. Making management presentations
17. Simple sampling techniques

Training

Individuals who have been designated to work on PATs should receive training immediately prior to beginning to work on the team. There should not be an extended period of time between the training and beginning to work on the PAT. Also, while not mandatory, many organizations have elected to train PAT members as a team. This strategy has been shown to optimize the training since the training can be tailored to meet individual team needs. Typical skills PAT members may need are identified above. Courses on group dynamics and quantitative methods are definitely necessary.

Skill Training: Quantitative Methods

Basic training in statistics for PATs usually covers the following types of activities:

1. A review of TQM principles
2. The Plan-Do-Check-Act (PDCA) of the process improvement
3. An elemental review of statistical theory.
4. The influence of special and common causes on process variation
5. Exercises on central tendency measures and variation

6. Flow charting
7. Cause and effect diagrams
8. Check sheets
9. Histograms
10. Pareto charts
11. Scatter diagrams
12. Run charts
13. Control charts

Training

The quantitative methods training focuses on the Shewart Cycle (Plan, Do, Check, Act) and the scientific method of problem solving. The tools for taking measurements and identifying solutions are presented as part of a quantitative methods course. Look for a course with the key ingredients identified above.

Skill Training: Group Dynamics

**Typical Group Dynamics training usually includes content that
addresses the following KSAs:**

1. An explanation of group
    dynamics
2. Impact of group dynamics on
    TQM groups
3. A discussion/assessment of
    leadership styles
4. Group dynamics (process) tasks
    versus problem-solving (content)
    tasks
5. Barriers and benefits to working
    in groups

6. Helping or hindering group
    behaviors
7. Stages of group development
8. Maximizing group participation
9. Role definitions
10. Goal clarification
11. Establishing ground rules
12. Preventing group floundering
13. Teambuilding

Training

The optimal time for this training to occur is when teams are forming or as soon as
possible after they begin. Group productivity will be enhanced if participants receive
training early in the process. Over the years, organizational cultures have evolved
such that people frequently work independently to accomplish their tasks. One of
the major tenets of TQM is that people work together in order to solve organizational
problems. In order to maximize productivity and efficiency of group problem solving,
individuals who work together in groups need to have some basic understanding and
awareness of group dynamics. Research has shown that certain types of tasks are
best accomplished in a group.

Many organizations are not equipped to provide this type of training internally. This
is an area where it is recommended that organizations seek external experts. If the
organization wishes to use internal staff selection criteria need to be developed for
individuals to be trained as instructors. Once selected, they should receive the
training, and go through a train-the-trainer course.

Job Related Training

Some examples of job related training that may be needed:

1. Job instruction training
2. Effective use of personal computers
3. How to develop quality specifications and standards
4. Meeting management
5. Decision-making
6. Managing change
7. New leadership principles
8. Coaching
9. Teambuilding
10. Optimizing human resources
11. Paperwork simplification
12. Time management
13. Cost of poor quality
14. Writing

Training

Organizations that are committed to producing quality products and services also have a strong commitment to on-going training. They understand that a trained or educated employee has a higher probability of producing the types of goods and services that are required than an untrained or uneducated one. Identified above are some examples of other job related training that may be necessary for employees to continue to excel on the job.

Skills Training

THE TOTAL ORGANIZATION

- <u>GO</u> beyond awareness training

- Make sure new employees <u>GET</u> TQM awareness training

Training

The implementer has an important role in making sure that training emphasis is sustained with the same attention as improvements. Close coordination with personnel and training departments will ensure the necessary involvement. Arranging for team training is a unique requirement for TQM. The implementer needs to provide assistance to schedule the team training.

After providing quality awareness training, implementers and managers need to ensure that training in quality skills is offered. Quality skills training is designed to give the employee the basic skills necessary to function in the total quality environment.

CLASS DISCUSSION:

What can you do when you lack training funds?

How do you reinforce training?

How Should Training Be Conducted?

Awareness and Specific Skills Training Should be Taught by the Following:

- Quality experts
- In-House staff
- Academic Institutions
- Managers
- Private sector

- DOD schools
- Other organizations within Federal government
- State and local governments
- Contractors

Training

To the extent feasible, top and middle management should be exposed to briefings from quality experts. This tends to legitimize the purpose as well as the content. Other awareness training may be developed externally by contractors, or may be developed internally provided in-house staff have had adequate grounding in TQM concepts, tools and techniques. There is a consensus among the experts that, to the extent feasible, middle managers and first line supervisors should assume the responsibility for orienting staff that are assigned to them. The rationale behind this strategy is that it begins to demonstrate commitment, ownership and support of management for the process. It is recommended that all employee orientations be delivered in "family" groups, e.g., all employees within a work unit should receive the training as a group with the leadership present. There are many options for training, depending on available resources:

- OSD Courses
- Other Federal Agencies
- Consultant/Contractors
- Private Sector

10-16

How Should Training Be Conducted?

It is recommended that organizations secure some type of external assistance in designing, developing and delivering training for individuals for PATs. This is because most of the time, in-house staff do not have the skills needed to develop the type of training mentioned above. However, content specialists and training specialists need to be involved in the design and development of the coursework. In-house staff can be trained to deliver the training after they have had proper presenter training.

Resources Available

FEDERAL QUALITY INSTITUTE

- Provides quality awareness seminars and follow-up to top officials and senior executives to encourage management understanding of and commitment to TQM

- Provides agencies with assistance in implementing TQM by making -available to them a roster of qualified private sector consultants through a Federal supply schedule contract

- Maintains a quality and productivity information center, which has an extensive library of materials on quality practices and training.

Training

The Federal Quality Institute (FQI) was established in 1988 as part of the government-wide effort to improve quality and productivity. The resource center in FQI can provide information about training courses currently available within Federal agencies and the private sector. The FQI is also a primary vehicle of information, training, and consulting services available to agencies on the subject of TQM. Agencies are encouraged to use its expertise and resources.

For more information, contact:

Federal Quality Institute
P.O. Box 99
Washington, D.C. 20044-0099
(202) 376-3747

Resources Available

DEFENSE SYSTEMS MANAGEMENT COLLEGE

Offers Several

Courses On TQM

For Managers

Training

The Defense Systems Management College offers a TQM course (since
1989). This course addresses theory and application of TQM principles in the
DOD environment. The course is open to military officers in grades 0-4
through 0-6 and civilians in grades GS-13 through GS-15. Individuals holding
equivalent grades in other federal agencies and defense-related industries
are encouraged to attend.

For more information, contact: (703) 664-2457 or Autovon 354-2457.

Training in a TQM Organization

MATURE TRAINING PROGRAMS

- Systematic

- Constant improvement

- High percentage of personnel trained

Training

- A mature training program has a systematic, documented approach to deciding what training is needed. In addition, training is evaluated for effectiveness and continuously improved. All personnel are trained in support of continuous improvement, and all executives, managers, and supervisors use quality improvement methods and act as trainers and coaches.

- Employees apply quality improvement methods in teams and as individuals; they serve as trainers and facilitators.

- Frequent updates on new developments in the quality improvement field are shared with the organization.

Training in a TQM Organization

- Training plans are fully integrated into overall strategic, quality planning; key strategies exist for increasing the effectiveness and productivity of all employee groups.

- Training investment shows clear evidence of human resource development priority.

- A positive atmosphere of trust and respect exists between management and employees; the management style fully reflects the use of participative management training.

Training in a TQM Environment

Too often employees are placed in new assignments where they are:

- Untrained

- Unmotivated - not inspired by challenge of job

- Unsure of themselves

Training

- Workers training workers often creates a situation in which errors tend to perpetuate.

- Examples: Don't know OSD processes
  Don't know organization's mission

CLASS DISCUSSION:

What do you do now for new employees to prepare them for a new job?

In light of the material in this module, what additional things should you be doing?

In Summary

A TQM TRAINING PROGRAM

- Based on Needs Assessment

- Provided from Top-Down

- Emphasis on Team Training

- Across the Organization

Training

TQM places the highest priority on training. The training has to happen or TQM won't happen. The implementer has to be active in the training: Supporting it, providing it, and checking that it is being done properly.

MODULE ELEVEN

MAINTAIN

MOMENTUM

Maintain Momentum

Module Eleven Objectives

Upon completion of this module, the participant will be able to:

- Initiate momentum to support TQM transformation

- List criteria for a recognition program to build TQM support

- Implement methods to incorporate TQM into daily activities

- Institutionalize infrastructure mechanisms to accommodate
  infusion of new personnel and turnover

- Initiate TQM expansion into other parts of the organization.

Maintain Momentum

The purpose of this module is to provide participants with several methods to
establish TQM into the day-to-day operation of OSD. Tools and techniques are
presented to provide implementers with ideas and initiatives they may use to spur
TQM adaptation in their functional area. As an implementer, you need to seek
strategies on how the organization can support the institutionalization of TQM.

The Implementer's Role
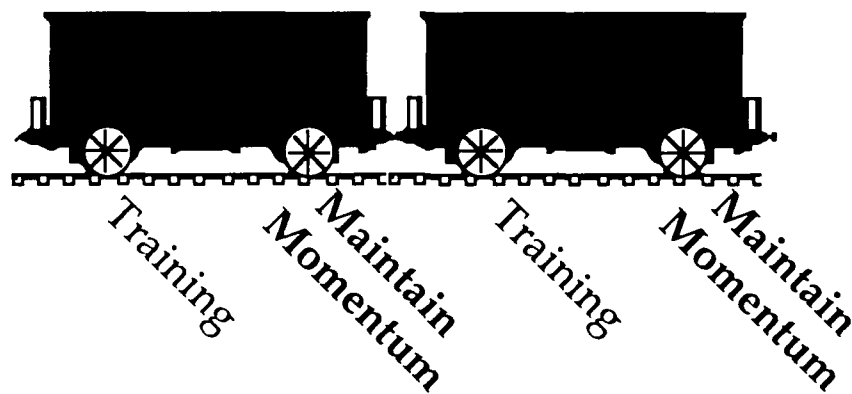
Maintain Momentum

Although the implementer's role in maintaining momentum is very important, it is motivating to know that in this stage of the process improvement effort, carrying out your role can provide a great deal of satisfaction. It is rewarding to communicate successes to everyone, help institutionalize TQM in other organizational units, and assist other implementers and managers in other organizational units implement process improvement efforts in their area(s) of responsibility. Lead TQM implementers from government, the military and industry have commented that this stage is still a lot of work, but highly pleasurable and rewarding.

Initiate Momentum

- Utilize a "Breakthrough Strategy" to gain immediate success and momentum using key managers who support TQM

- Concentrate efforts and resources on small processes where TQM application can have immediate success

- Concentrate activity and training on the individuals most closely associated with the processes

- High resistance equals low probability of success.

Maintain Momentum

One strategy to initiate momentum is to locate and start process improvements that can be achieved quickly. The performance improvement opportunities and goals that have been established by QMBs/PATs are primary targets for change. Immediate successes can be then used as stepping stones to tackle more complex processes.

Initial time and energies (except for training) should not be invested in individuals or groups that are reluctant or will resist the organization's TQM efforts. For example:

- 3M's strategy for gaining commitment is not to mandate quality but to create an environment which encourages individuals and plants to volunteer and accept ownership of initiatives. Plants that were reluctant to adopt TQM were not forced to participate.

- In OSD, the Office of Assistant Secretary of Defense, Public Affairs has been aggressive in adopting TQM by ensuring that all their personnel receive TQM training and their functions all emphasize quality as the primary guide for measuring achievement.

Initiate Momentum

The TQM implementer must make arrangements to publicize success stories.
Advertising successes can be accomplished in many ways:

- feedback successes to the QMB and ESC
- announce achievement in management meeting
- writing articles for a newsletter
- publicity of TQM efforts and needs in journals and magazines
- verbal praise
- on-the-spot awards.

All of the publicity must focus on the process improvement and teamwork. Articles
should show only team pictures and graphics that show how the process was improved.
In all this publicity, the TQM implementer should maintain a low profile. Remember:
There is no limit to what can be achieved if it doesn't matter who gets the credit!

Develop A Recognition Program

Team
Contributions

Continued   Public
Commitment   Recognition
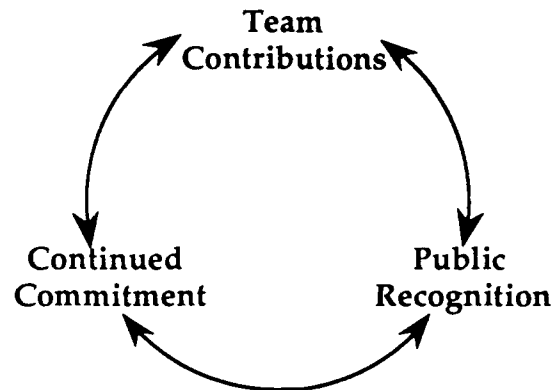
Maintain Momentum

Existing recognition programs must be reviewed and modified to support TQM initiatives. Work habits and enthusiasm can be affected through organization and group recognition. It is important to remain open to suggestions from the work force to remain abreast of their needs and interests. Communicating the types of awards and procedures to all employees is critical to the use of this vehicle in reinforcing the organization's focus on TQM activities.

Awards and incentives should be directly linked to process improvements and teamwork. If there is no clear link, the program must be modified in some way. The recognition program has to have two tracks:

- one track for individual achievements
- one track for recognizing teamwork and cross-functional cooperation.

Develop A Recognition Program

HOW PRODUCTIVITY GAIN SHARING AND TQM RELATE

TQM   **PGS**

Economic
Theory

Emphasis on
Quality

Process
Improvement

Customer Focus
Long Term View
Mission Driven
Organization-Wide
Continuous Improvement
Improvement Tools
Employee Involvement
Performance Feedback
Management Responsibility
Improved Communication
Cost Reduction
Education/Training

Equitable
Sharing of
Productivity Gains

Motivation

Maintain Momentum

One of the recognition and reward systems gaining increased attention is the Productivity Gain Sharing System in the Department of the Navy (available for civilians).

OCPM defines Productivity Gain Sharing (PGS) as "group-based incentive and involvement systems designed to maximize total performance of resources for mission accomplishment through sharing the gains from proven improvements in productivity with the employees, the activity, and the customer per a pre-determined formula".

As the graphic depicts, PGS and TQM share many common elements.

Reference:
Office of Civilian Personnel Management, Southwest Region. Productivity Gain Sharing Overview Briefing

Develop A Recognition Program

Establishing a Recognition Program requires a formal selection and evaluation process that should apply the following criteria:

- Timely

- Tied to a specific, observable accomplishment

- Require minimal documentation

- Promote and recognize both group and individual achievements.

Maintain Momentum

The recognition program should also emphasize non-financial reward systems. These rewards recognize individuals and/or teams that meet their quality improvement goals or otherwise perform in an outstanding way toward quality improvement. Recognition should be given for achieving specific goals and other employees should know that the recognition was deserved. In this way, employees know that management sincerely appreciates their contributions. Properly structured recognition programs are taken seriously by employees therefore, they must be consistent with TQM principles. People perform at a higher level of productivity when they are recognized for doing a good job. An effective rewards program is part of this recognition program.

CLASS DISCUSSION:

What are some ideas for non-monetary rewards and recognition activities/processes?

What strategies should be developed to ensure the award system is understood by all personnel?

Develop A Recognition Program

The program should be related to the following activities:

- Customer relationships
- Teamwork/cross-functional cooperation
- Innovation
- Risk-taking
- Process improvements

Maintain Momentum

The program's administration must be flexible in procedures to prevent delays in recognition. The processing time from the award winning activity until award presentation should be less than two weeks calendar time. This kind of responsiveness can only be achieved if the award process has been streamlined and automated for administrative actions. This involves establishing award categories and having award decisions made at the lowest possible level.

A caution! Administrative efficiency has to be distinguished from award significance. If the administrative efficiency allows proliferation of awards they become trivial and do not serve their intended purpose.

Develop A Recognition Program

Evaluate and choose the types of rewards that will best suit the needs of your organization:

- Monetary: outstanding contribution, consistently high standard, etc.

- Non-monetary: trips to customer locations, divisional recognition meetings, special parking spaces, articles in newsletter, annual conferences, verbal recognition, special job assignments, plaque, luncheons, etc. Rewards must be meaningful.

Maintain Momentum

Potential problems in developing a recognition program:

- Small monetary awards may not be meaningful
- Non-monetary awards should not be used as "consolation prizes"
- A realistic weighting system for properly rewarding accomplishments should be developed.

To overcome these potential problems, an evaluation of the current recognition program and a survey (formal or informal) should be conducted to document the employee expectations.

TQM Infusion

Incorporate TQM into the daily activities of the workforce by:

• Publicizing information on the progress of TQM efforts to stimulate employee empowerment and ownership

• Incorporating TQM responsibilities and practices in job descriptions and performance appraisals

• Demonstrating commitment through tangible actions in addition to written policies and speeches. The workforce judges commitment of management by their behavior. Top leadership in the work place is one of the most effective means of transmitting commitment. They should make regular visits--not publicity events.

Maintain Momentum

To successfully incorporate TQM into daily activities of the work force, the implementer must help managers remove barriers, establish trust, and communicate.

REMOVE BARRIERS: Managers must continually seek out and remove barriers so that employees can effectively perform their jobs.

ESTABLISH TRUST: Invite employees to participate in the decision-making process and give them more latitude in how they perform their work.

COMMUNICATE: It is vital to sustain awareness and commitment through continuous dialogue between managers and employees. In a TQM culture, management and employee association is frequent and evolves to a way of getting things done.

Institutionalize TQM

- Members and groups involved in ESCs, QMBs and PATs should be rotated in order to institutionalize the infrastructure mechanisms.

- Orientation of new personnel should include awareness of the TQM infrastructure.

- The key is to transport success/improvements to other organizational units and facilities. Implementers should work to transfer "lessons learned" during their process improvement efforts.

Maintain Momentum

It is important to share information about the activities involved in each of these infrastructure meetings with all personnel.

The more success and the more involved the TQM infrastructure becomes in implementing improvements and stressing quality, the more it will become a part of the day-to-day operations of the organization. Over time, the organizational structure will take on the characteristics of the TQM infrastructure and distinguishing one from the other will not be possible. This type of organizational evolution cannot be expected in a short time span.

Spread TQM

THE TQM VIRUS

Maintain Momentum
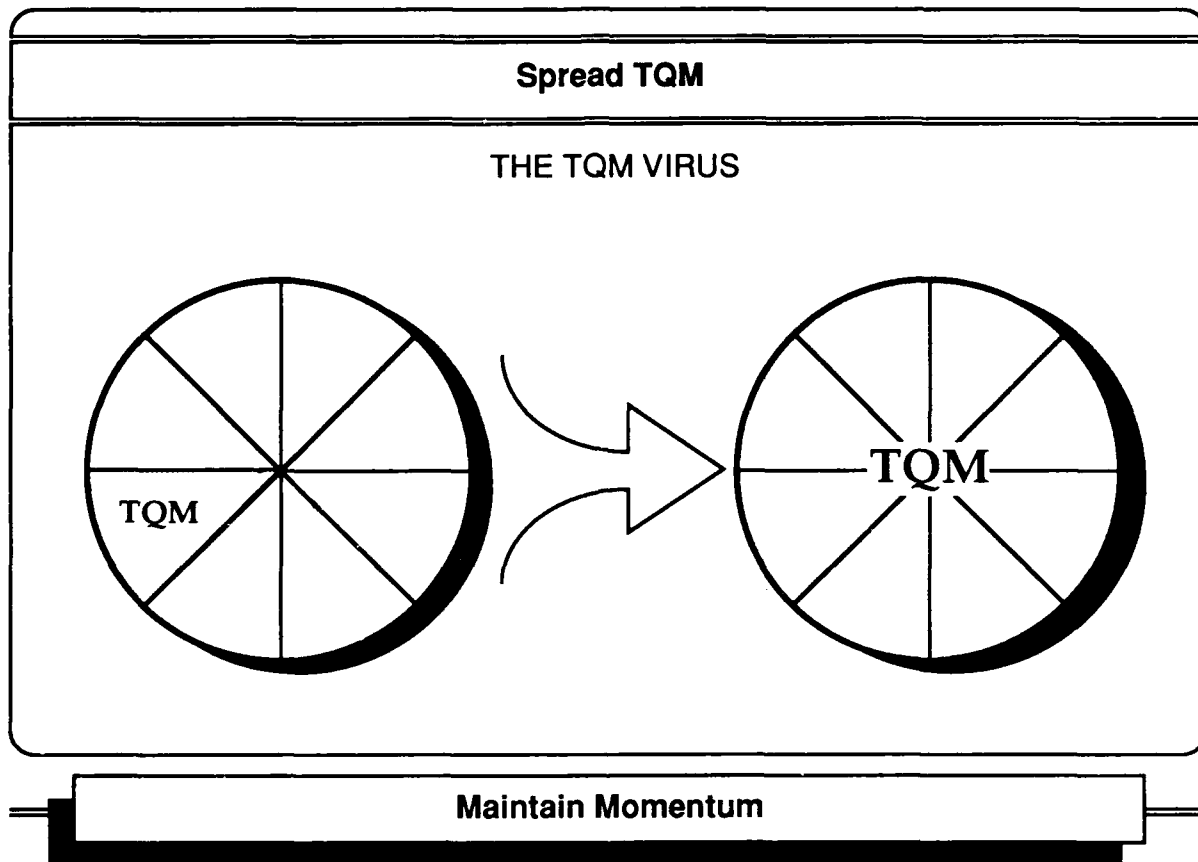
While the initial focus of TQM implementation is in your group, the ultimate goal is to make TQM a "way of life" for OSD in its entirety.

Implementers spread the TQM virus--it's a good virus!

Implementers need to:

- Break down barriers between departments and divisions

- Promote cross-functional teams to foster improved internal customer/ supplier relationships.

Cooperation across departments and divisions will help the organization as a whole carry out its mission. There should be communication upward and downward throughout your organization.

Cross-functional teaming is a natural outgrowth of flow-charting processes. Flow-charting surfaces interactions, both formal and informal.

Spread TQM

- Communicate TQM successes to other parts of the organization

- Share lessons learned

- Seek the participation of the key individuals in a QMB or PAT

- Assist other organizations in establishing vision, infrastructure, etc.

Maintain Momentum

After firmly establishing TQM in your division, your knowledge and experiences should be communicated to other divisions. Identify key individuals in a similar position who would be likely to invest in TQM. Use the same approach you learned for gaining commitment from your top management in Module 4. Share the methodology used in setting up the framework for TQM efforts in your unit. Send courtesy copies of newsletters. Present several examples of processes studied and resulting benefits. Focus on how these individuals can gain first-hand experience, i.e., allow them to sit on a PAT. If possible, volunteer yourself and/or a PAT leader to start a PAT in their organization.

You can also help spread TQM to other parts of the organization by contacting internal organizational departments (e.g., the Pentagon Library, the Federal Quality Institute) for TQM updates and information.

In Summary

This module covered the following:

• Strategies for initiating momentum of TQM transformation

• Criteria for developing recognition program to build and sustain support

• Strategies for institutionalizing the infrastructure mechanisms to withstand changes in personnel

• Strategies for expanding TQM into other parts of OSD.

Maintain Momentum

One of the basic principles underlying the Total Quality Management philosophy is continuous improvement. Maintaining momentum and commitment to this continuous improvement process ensures that TQM will indeed be a "way of life" in OSD.

OSD IMPLEMENTERS WORKSHOP

PARTICIPANT EXERCISE

INDIVIDUAL ACTION PLAN

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Exercise Objective:

The purpose of this exercise is to give you the opportunity to assimilate the information presented in this course into your own Individual Action Plan. Your Action Plan will focus on the steps you will take to implement TQM in your area of responsibility. At the end of this exercise, you will be prepared to take your first steps in supporting implementation of TQM efforts in your area of responsibility.

Instructions:
Try to answer each question as thoroughly and completely as you can, drawing upon concepts and ideas presented in class as well as your own ideas. Remember to focus answers about how you would do these things in your area of responsibility.

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I. COMMITMENT

A. Design a strategy specific to your organizational unit to gain your top managements' commitment (refer to 4-18).

B. What specific behaviors can your top management most effectively demonstrate to show commitment to TQM implementation in your organization? Why?

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II. VISION

A. If you identified a vision for your organization and/or work unit (see Module 5), does it reflect your organization's mission and values and objectives? How do you know?

B. How would you communicate the needed changes to the right party responsible for modifying? Who is the right party?

C. If your work unit has specific area objectives and values, are they just words or are they "happening"?

D. What evidence do you have of this?

E. What do you, as an implementer, need to do to ensure that they do happen?

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III. INFRASTURCTURE

A. Identify the infrastructures currently in place in your organizational unit and the areas they are studying (refer to 6-5).

<u>ESC</u>　　　　　　　　　<u>QMB</u>　　　　　　　　<u>PAT</u>

B. If you do not know the extent to which the infrastructure exist (and the areas they study), what steps will you take to find this information?

C. Develop a list of activities that you plan to use to show support of the TQM infrastructure.

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IV. IDENTIFY PROCESS IMPROVEMENT OPPORTUNITIES

A. What is the implementer's role in identifying process improvement opportunities?

B. What are some ways to identify process improvements?

C. What systems and procedures for identifying process improvements are currently in place in your organization?

D. What could you do to improve/add to systems and procedures in order to effectively identify process improvements?

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V. EVALUATE AND RECYCLE

A. What is your role in the evaluation and recycle stages of process improvement efforts?

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VI. TRAINING

A. What types of training are available in your organizational unit?

B. If funding for training is limited, what strategies would you use to get the work-force trained?

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VII. MAINTAIN MOMENTUM

A. What strategies would you use to maintain awareness and enthusiasm for TQM in your organization?

B. After identifying another part of your organization as a potential site for TQM implementation, how would you approach key individuals (include positions, titles)?

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Now that you have completed your Individual Action Plan, make a list of action items that you will accomplish back in your organizational unit. These should be in priority order and specify a target completion date.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

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Course Summary

Now that you have completed this course, you should be able to:

- Describe the steps necessary for successful TQM implementation

- Identify the specific activities that you, as an implementer, will do to facilitate the successful implementation of TQM in your organizational unit.

Course Summary

This course was presented in eleven modules; each describing activities necessary for successfully implementing TQM and the role that you, as an implementer, play in these activities.

Now that you have developed your individual action plan and have your action items prioritized, state the single major benefit you derived from this course.

The End

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DEPARTMENT OF DEFENSE

May 15, 1990

PLAN OF INSTRUCTION

FOR

TOTAL QUALITY MANAGEMENT (TQM)

Implementers Workshop

Prepared For:
The Office of the
Secretary of Defense

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Prepared By:
Booz • Allen & Hamilton Inc.
Human Resources Management Practice
4330 East West Highway
Bethesda, Maryland 20814

Preface

The Total Quality Management (TQM) Implementers Workshop consists of eleven (11) modules of training. The modules are designed to be delivered in eighteen (18) hours of instruction and encompass three (3) complete training days.

Table of Contents

COURSE DESIGN

Purpose

The purpose of this workshop is to provide implementer training for designated Department of Defense civilian and military personnel. The course provides participants with the skills necessary for successful, organization-wide TQM implementation and details the specific activities the implementer performs to facilitate the successful implementation of TQM in his or her organizational unit. The seminar is also designed to encourage participants to employ TQM concepts in their areas of responsibility, and provide examples of how TQM can be used successfully in both the private and Federal sector.

Each of the modules in this course addresses a major aspect regarding the implementation of TQM in the Department of Defense, OSD or the functional area of the TQM implementer. Module One contains a brief overview of the course. Module Two is a review of major TQM concepts and principles as detailed in the TQM Awareness Seminar. Module three describes implementer roles and responsibilities, identifies key implementer activities, and prepares course participants for the remaining modules. Throughout the remaining modules, the participant is challenged to identify the implementer's role in attaining the goals of the TQM organization.

Module Four reveals several strategies to achieve top management commitment to the institutionalization of the concepts, principles and day-to-day activities of a TQM organization. Module Five focuses on the development of a vision and the implementer's role in vision development. Module Six establishes the infrastructure required for successful TQM implementation; Executive Steering Committees (ESCs), Quality Management Boards (QMBs), and Process Action Teams (PATs). In Module Seven, the discussion focuses on the strategies for identifying and prioritizing process improvement opportunities. Course participants will have the opportunity to work with one another in a group exercise designed to help participants understand their responsibilities in the identification of processes for improvement. Module Eight explains how the implementer works with a QMB and/or PAT to ensure that a valid implementation plan is written and put into action. Module Nine states the role of the implementer in evaluating and recycling process improvement efforts. Module Ten addresses the role of the implementer in promoting TQM training. The course concludes with Module Eleven which identifies several methods for establishing TQM in the day-to-day operation of OSD.

Course Objectives

Upon completion of the course, participants will be able to:

1. Describe the steps necessary for successful TQM implementation..

2. Identify the specific activities that the implementer will do to facilitate the successful implementation of TQM in his/her organizational unit.

Module Sub-Objectives

Upon completion of each module, participants will be able to:

Module I

1. Describe course rationale.

2. Describe the DOD TQM Implementation Plan.

3. Describe course content.

Module II

1. Identify and explain key TQM concepts and principles.

2. Summarize several other TQM concepts and principles that will be covered during the course.

Module III

1. Describe the existing OSD structure and the impact of the TQM infrastructure.

2. Identify key TQM implementer activities.

3. Discuss the pivotal nature of the implementer's role.

Module IV

1. Understand and select alternative strategies to achieve top management commitment to TQM principles and philosophy.

2. Assist top management in actively demonstrating visible commitment to the TQM process.

Module V

1. Describe characteristics of a vision.

2. Explain the need for a vision.

3. Discuss development process of a vision.

4. Understand purpose of strategic objectives.

5. Describe the purpose of a mission.

6. Understand the values and guiding principles.

7. Discuss ways to cascade the vision and specific division missions and guiding principles throughout the organization.

Module VI

1. Discuss the implementer's role in supporting the infrastructure.

2. Specify the types of infrastructures that are necessary for successful TQM implementation.

3. Describe the functions of ESCs, QMBs and PATs.

4. Describe the actions necessary for establishing the TQM infrastructure.

Module VII

1. Identify criteria for selecting TQM implementation projects.

2. Understand the importance of systematic procedures for generating improvements.

3. Identify actions necessary for establishing a system for identifying improvement opportunities.

4. Identify tools and techniques used in process improvements.

6. Write a properly structured problem statement.

Module VIII

1. Identify the roles and responsibilities of the implementer in carrying out the plan.

2. Identify the components of an action plan for implementing PAT recommendations.

3. Develop a plan to prepare for implementation efforts.

Module IX

1. State the implementer's role in evaluating and recycling process improvement efforts.

2. Identify the five levels at which TQM evaluation may be done and state appropriate indicators.

3. Describe the role of recycling in the TQM process.

4. Identify approaches which contribute to continuous improvement and recycling.

Module X

1. Assist the Training/Quality office in developing the guidelines for a needs assessment.

2. Identify the types of training courses necessary for a TQM transformation.

3. Discuss the criticality of training to implement success.

Module XI

1. Initiate momentum to support TQM transformation.

2. List criteria for a recognition program to build TQM support.

3. Implement methods to incorporate TQM into daily activities.

4. Institutionalize infrasturcture mechanisms to accommodate changes in personnel.

5. Initiate TQM expansion into other parts of the organization.

Course Schedule

The course schedule is provided on pages 1-7 through 1-9 of the student manual.

Course Outline

The course outline is presented on page i of the student manual.

COURSE MANAGEMENT

Instructor Qualifications

Instructors for this course must have attended the TQM Awareness Course and completed the TQM Presenter's Course.

Target Audience

The target audience for the Implementers Course is DON civilian and military upper- and mid-level managers (SES, GS, Flag Officers, and senior officers -- 06 through 05).

The course was designed to recognize the experience and leadership responsibilities of these high-level personnel, and to challenge their notions of effective management methods.

Course Materials

Instructor Materials

- Plan of Instruction
- TQM Implementers Course student manual (SM)
- VHS videotapes: The Leadership Alliance; Journey towards quality
- Vu-graph set
- Four decks of playing cards
- Card Coordination Corporation (CCC) Exercise Handouts
- Overhead projector
- Participant evaluation forms
- Participant name tags and table name plates
- Markers and tape

Participant Materials

- TQM Implementers course student manual (SM)

Course Instructional Methods

The instructional methodology for all eleven course modules will be a combination of lecture, guided group discussion, participant exercises, games, and case studies.

Participants will be encouraged to take notes in their TQM Implementers Course student manuals. The student manual provides a reduced copy of approximately 95% cf the vu-graphs used in the Implementers Course and text related to the information in the vu-graphs.

Course References

An extensive bibliography is published in the appendix of the student manual for the Implementers Course.

MODULE ONE

COURSE OVERVIEW

Module One Objectives

Upon completion of this module, the participant will be able to:

- Describe course rationale

- Describe course content.

TQM *TOTAL QUALITY MANAGEMENT*

Course Rationale

RATIONALE:

Help OSD managers design, build, and maintain the management systems
needed for achieving OSD's TQM goals.

PURPOSE:

To provide senior and mid-level managers with practical skills and strategies
for leading TQM implementation within OSD.

TOTAL QUALITY MANAGEMENT

Course Framework

Total Quality Management

Gain Commitment · Develop Vision · Establish Infrastructure · Identify Process Improvement Opportunity · Implement PAT Recommendations · Evaluate & Recycle · Implementer · TQM

Training · Maintain Momentum

The Track To Continuous Improvement

TOTAL QUALITY
MANAGEMENT

The Implementer's Role

TQM

Training

Maintain Momentum

Course Content

Eleven Modules

Module 1   Overview
Module 2   TQM Concepts
Module 3   The Implementer's Role
Module 4   Gain Top Management Commitment
Module 5   Develop A Vision
Module 6   Establish Infrastructures
Module 7   Identify Process Improvement Opportunities
Module 8   Implement Process Action Team Recommendations
Module 9   Evaluate and Recycle
Module 10 Training
Module 11 Maintain Momentum

TOTAL QUALITY
MANAGEMENT

AGENDA

DAY ONE

Time	Module
9:00-9:15	Module 1: Course Overview Introductions, Logistics
9:15-9:30	Module 2: TQM Review
9:30-10:30	Module 3: The Implementer's Role
10:30-10:45	(Break)
10:45-11:15	Module 3: The Implementer's Role (Cont'd)
11:15-12:00	Module 4: Top Management Commitment
12:00-1:00	Lunch
1:00-2:00	Module 4: Top Management Commitment (Cont'd)
2:00-2:15	(Break)
2:15-3:15	Module 5: Develop A Vision
3:15-3:45	Module 6: Establish Infrastructures
3:45-4:00	Summary and Day 2 Agenda

TQM TOTAL QUALITY MANAGEMENT

AGENDA

DAY TWO

9:00-10:30	Module 7:	Identify Process Improvement Opportunities
10:30-10:45	*(Break)*	
10:45-12:00	Module 8:	Implementing PAT Recommendations
12:00-1:00	*Lunch*	
1:00-2:30	Module 8:	Implement PAT Recommendations (Cont'd)
2:15-2:30	*(Break)*	
2:30-3:45	Module 9:	Evaluate and Recycle
3:45-4:00		Summary and Day 3 Agenda

TQM
TOTAL QUALITY
MANAGEMENT

AGENDA

DAY THREE

9:00-10:15	Module 10: Training
10:15-10:30	(Break)
10:30-11:15	Module 10: Training (Cont'd)
11:15-12:00	Module 11: Maintain Momentum
12:00-1:00	Lunch
1:00-2:30	Individual Action Plan
2:30-2:45	(Break)
2:45-3:00	Summary
3:00-3:15	Evaluation

TOTAL QUALITY
MANAGEMENT

MODULE TWO

TQM REVIEW

Module Two Objectives

Upon completion of this module, the participant will be able to:

- Identify and explain key TQM concepts and principles.

- Summarize several other TQM concepts and principles that will be covered during this course.

TQM Review

- All Level Responsibility

- Principle aspects of the TQM concept

- Common themes of TQM experts

- TQM emphasis on process

- Progression of American management styles

TOTAL QUALITY
MANAGEMENT

TQM Review

DOD TQM DEFINITION

Total Quality Management (TQM) is both a **philosophy** and a set of **guiding principles** that represent the foundation of a **continuously improving** organization. TQM is the application of **quantitative methods** and **human resources** to improve the material and services supplied to an organization, and the degree to which the **needs of the customer** are met, now and in the future. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a **disciplined approach** focused on continuous improvement.

TOTAL QUALITY MANAGEMENT

TQM Review

COMMON THEMES OF TQM EXPERTS

- Customer defines quality.
- Quality becomes prevention-based.
- Team approach to problem-solving.
- Statistical thinking is used to study processes.
- The customer is located internally and externally.
- Management creates the quality culture.
- Management provides for system improvements.
- Continuous improvement.
- Education and training are vital.

TOTAL QUALITY
MANAGEMENT

TQM Review

EMPHASIS ON PROCESS

CONTROL

NOT IN CONTROL

TQM Review

EMPHASIS ON PROCESS

Most of the problems are born

Begin to manifest

Full impact of problems show here

DESIGN → DEVELOPMENT → IMPLEMENTATION

2-7

TQM Review

MANAGEMENT'S PROGRESSION TOWARD MANAGEMENT BY RESULTS

1st Generation

Management by DOING

2nd Generation

Management by DIRECTING

3rd Generation

Management by RESULTS

4th Generation

Management by METHOD

TQM Review

THAT WAS THEN

THIS IS NOW

TQM

TOTAL QUALITY
MANAGEMENT

TOTAL QUALITY
MANAGEMENT

MODULE THREE

THE IMPLEMENTER'S ROLE

TQM
TOTAL QUALITY
MANAGEMENT

Module Three Objectives

Upon completion of this module, the participant will be able to:

- Describe the existing OSD structure and the impact of TQM infrastructure on it

- Identify key TQM implementer activities

- Discuss the pivotal nature of the TQM implementer's role.

TOTAL QUALITY MANAGEMENT

The Implementer's Role

The implementer fuels successful TQM implementation.

TOTAL QUALITY
MANAGEMENT

The Implementer's Role

- Not a position in itself

- A natural responsibility for senior and mid-level managers

- Supports the TQM infrastructure

- Cannot be delegated

The Implementer's Role

OSD Structure

TQM Infrastructure

SEC DEF

UNDER AND ASSISTANT SECRETARY LEVEL

DEPUTY ASSISTANT SECRETARY LEVEL

DIR LEVEL

STAFF LEVEL

ESC

QMBs

PATs

Workforce

TQM TOTAL QUALITY MANAGEMENT

The Implementer's Role

TQM IMPLEMENTER ACTIVITY

- Promoting TQM practices

- Developing Action Plans

- Need for involvement

- The key four questions

TQM

TOTAL QUALITY MANAGEMENT

Implementers Workshop

The Implementer's Role

TQM IMPLEMENTERS IN THE PIVOT

ACQUIRE FLEXIBILITY
EDUCATE

COOPERATION

TQM
IMPLEMENTER

SUPPORT
&
FLEXIBILITY
FOR ACTION

CHANNELS
FOR
NEGOTIATION

3-7

TQM
TOTAL QUALITY
MANAGEMENT

In Summary

In this module, we have:

- Described the existing OSD structure and the impact of TQM infrastructure on it

- Identified key TQM implementer activities

- Discussed the pivotal nature of the TQM implementer's role.

MODULE FOUR

TOP MANAGEMENT
COMMITMENT

Module Four Objectives

Upon completion of this module, the participant will be able to:

- Understand and select alternative strategies to achieve top management to commitment to TQM principles and philosophy

- Assist top management in actively demonstrating visible commitment to the TQM process.

TQM
TOTAL QUALITY
MANAGEMENT

The Implementer's Role

- Take the Initiative

- Be Creative

- Maintain Enthusiasm

Gain Commitment

Strategies

TOP EXECUTIVE BRIEFING AGENDA

Total Quality at Agency X
- **History of total quality**
- **Results to date**
- **Future plans**

Quality Education at Agency X
- **Phase I (Awareness)**
- **Phase II (Slides)**

Implementation Examples at Agency X

Panel Discussion/Question and Answer Session

Strategies
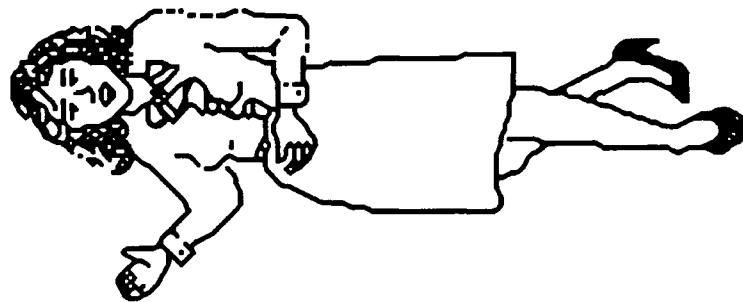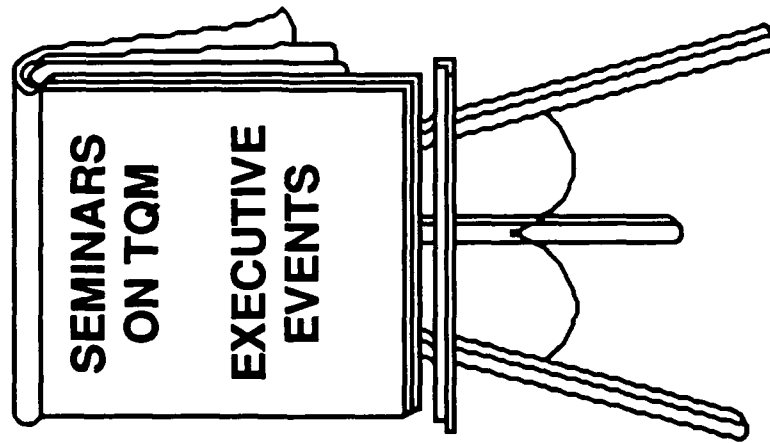
SEMINARS
ON TQM
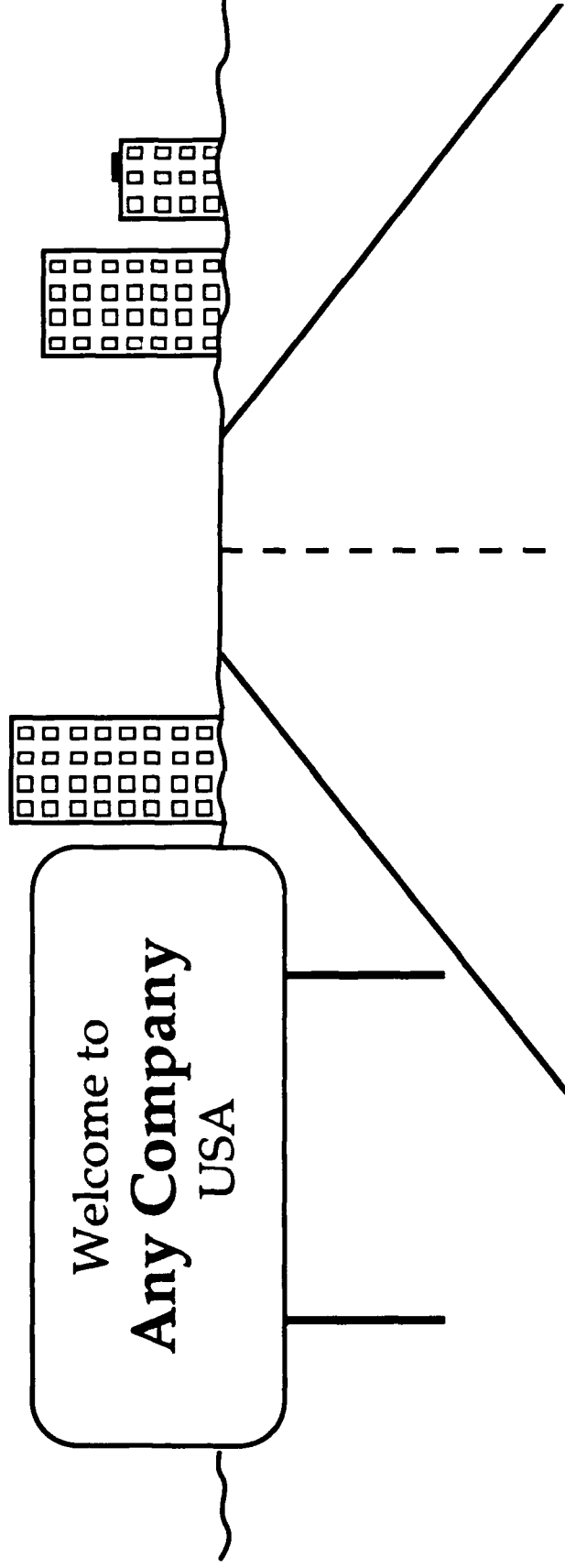
EXECUTIVE
EVENTS

Strategies

Welcome to
Any Company
USA

TQM TOTAL QUALITY MANAGEMENT

Strategies

Know the Success Stories

Private Sector Baldridge Award Winners:

Westinghouse
Motorola
Global Metallurgical
Xerox
Milliken & Co.

Public Sector Presidential Award Winner:

Naval Air Systems Command

4-7

TQM TOTAL QUALITY MANAGEMENT
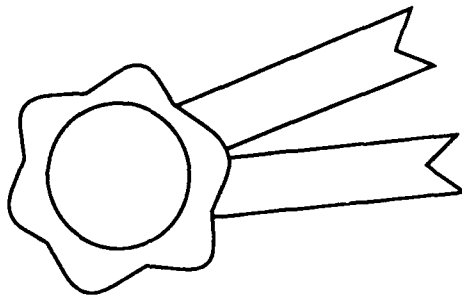
Strategies

EXAMPLE OF OFF-SITE MEETING AGENDA

1. Opening-
2. Why Improve?
3. Competitive Status
4. World trends in quality
5. Review of the improvement process
6. Force field analysis on what prevents the organization from being as good as it could be
7. Presentation of a successful improvement process - representative from another firm.
8. Summary and closing

Strategies

FILMS

TOTAL QUALITY
MANAGEMENT
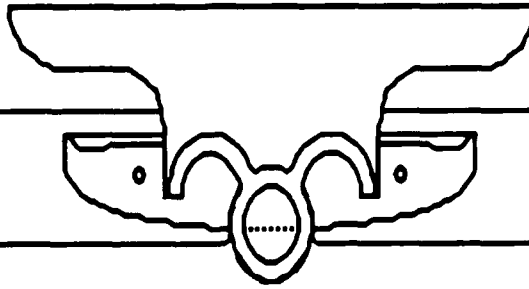
Demonstrating Top Management Commitment

Demonstrating Top Management Commitment

- Make TQM an agenda meeting

- Approach problem solving through the TQM infrastructure

- Set clear expectations and follow-up

- Attend TQM infrastructure meetings

- Allocate resources

- Recognize quality improvements

  - monetary
  - non-monetary

TQM

TOTAL QUALITY
MANAGEMENT

Demonstrating Top Management Commitment

- Become an associate instructor in seminars and courses or make presentations to employees on the quality effort

- Spend time meeting with groups of employees and listening

- Spend time in work areas

- Use videotape to increase top leadership exposure

- Act on suggestions

- Write a position/policy statement about the importance of TQM in the organization

- Write something for the organization's publication

Strategies

Multiple Sources

Tailored Experiences/ Events

Multiple Approaches

Combination of Ideas

Involve Top Management

Improvement Occurs "One Project At A Time"

In Summary

- Top management commitment involves a broad range of activities

- The implementer's role is to encourage and support the activities.

MODULE FIVE

DEVELOP

A

VISION

Module Five Objectives

Upon completion of this module, the participant will be able to:

- Describe characteristics and components of a vision

- Discuss the development process of a vision

- Discuss ways to cascade the vision and specific division missions and guiding principles throughout the organization.

TQM TOTAL QUALITY MANAGEMENT

The Implementer's Role

- Assist in vision development/modification process

- Integrate vision acceptance process with development process

- Develop a strategy to make vision, mission, values, and objectives come to life for their own work unit

- Assist senior working group in establishing a cascading process

- Coordinate and monitor cascading process

Develop Vision

TQM
TOTAL QUALITY MANAGEMENT

What Is A Vision?

?

?What Customer Do We Serve (internal and external)?

?Who Am I a Customer to?

?Why Does This Organization Exist?

?

What Is A Vision?

CHARACTERISTICS

- Innovative/Creative

- Focused on long-term opportunities

- Customer oriented

- Broad

- Identifiable to each and every employee

TQM TOTAL QUALITY MANAGEMENT

What Is A Vision?

Roadmap for Continuous Improvement

To be in business TOMORROW

- Promotes sense of shared expectations among all levels and generations of employees
- Serves as strategic management tool
- Consolidates values over time and across indivdiuals and interest groups
- Projects sense of worth

- Provides unity of direction that transcends individual, parochial, and transitory needs
- Provides organizational perspective to all employees
- Increases pride in workmanship
- Provides long-term focus/purpose

Set the course TODAY...

TOTAL QUALITY
MANAGEMENT

When Should A Vision Be Developed?

STOP

Develop
Vision

Continuous
Improvement

Gaining Acceptance

Sources

Internal

- Executive Board
- Employees
- Local Unions

VISION

External

- Customers
- Suppliers
- OSD
- Command HQ
- National Unions

TOTAL QUALITY MANAGEMENT

Development of A Vision

(Horizontal)

Vision

(V
e
r
t
i
c
a
l)

ORGANIZATIONAL STRATEGY

⟹ "Doing the Right Things"

SYSTEM DEFINITION

⟹ "Doing Things Right"

5-9

Development of A Vision

Vision Development Model

Vision

FUTURE

G
A
P

$\Rightarrow$

STRATEGIC
OBJECTIVES
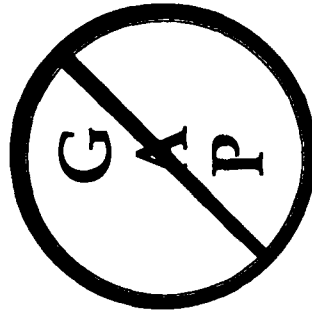
Reality

TODAY

TOTAL QUALITY MANAGEMENT

Strategic Objectives

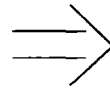## Vision Development Model

TODAY

Reality

- Benchmark position today
- Determine strengths & weaknesses
- Construct baseline for measuring progress

FUTURE

Vision

- Identify long-term opportunities
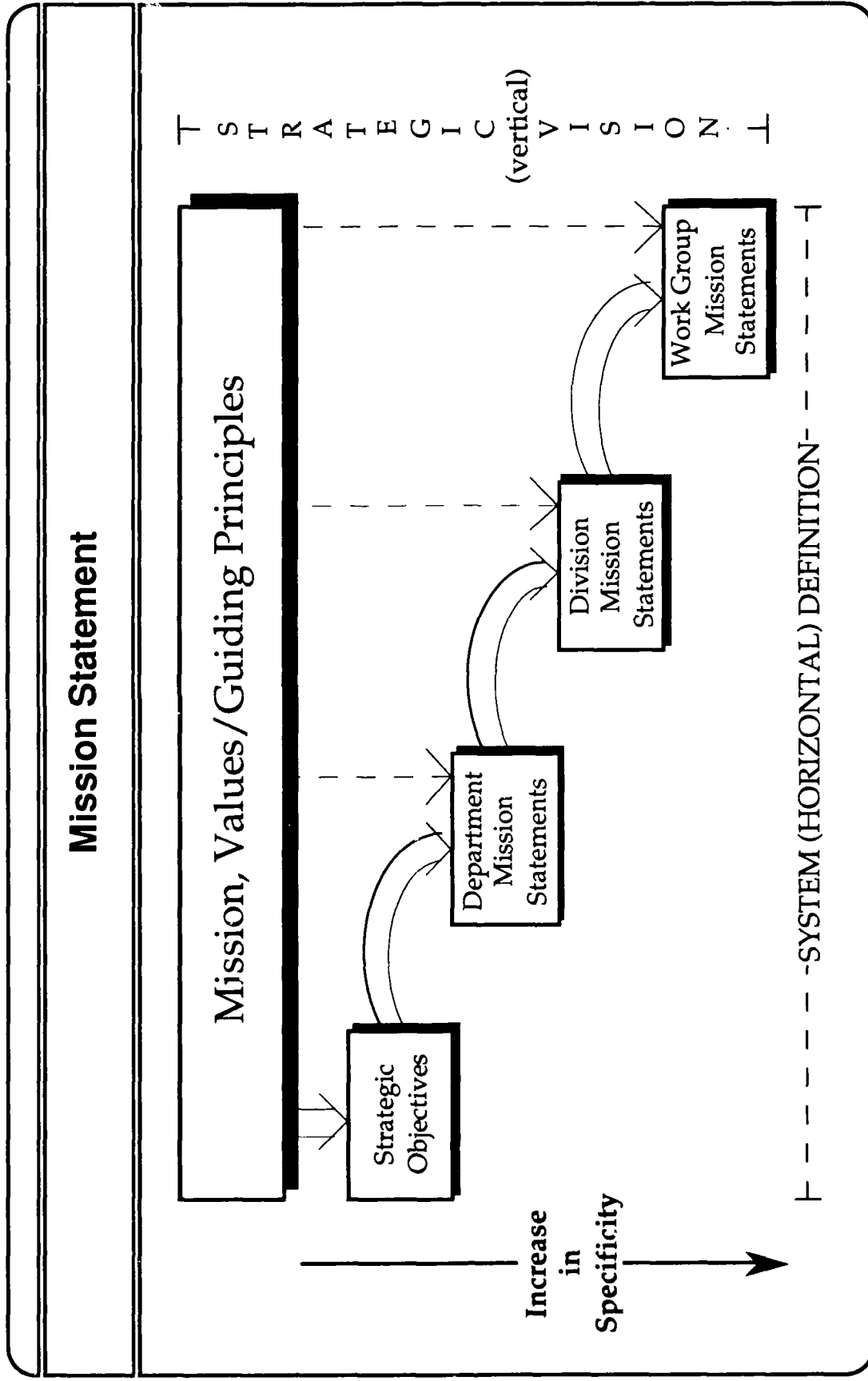- Identify customers
- Identify products/services

STRATEGIC OBJECTIVES

TOTAL QUALITY
MANAGEMENT
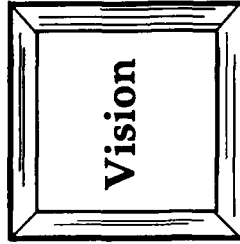
Values/Guiding Principles

- Managerial Philosophy

- Values

Mission Statement

- Products/Services
- Customers
- Technology

Mission Statement

Mission, Values/Guiding Principles

T S T R A T E G I C (vertical) V I S I O N

Strategic Objectives

Department Mission Statements

Division Mission Statements

Work Group Mission Statements

Increase in Specificity →

- - - SYSTEM (HORIZONTAL) DEFINITION- - - -

Vision/Guiding Principles Example

DEPARTMENT OF NAVY VISION STATEMENT

"Our purpose is to maintain a Navy and Marine Corps that can deter conflict because they are trained, organized and equipped to fight and win decisively. To serve this purpose now and in the future, we embrace quality as the foundation of our efforts."

TOTAL QUALITY
MANAGEMENT

Vision/Objectives/Values Example

Naval Aviation Depot, North Island

Vision Statement

"We will be the DOD leader in aviation maintenance, engineering, and logistics management through the accomplishment of long range objectives."

Vision/Values Example

Naval Avionics Center
Vision Statement

Our Only Reason For Existence Is To Support The Fleet.
In Order To Maximize The Effectiveness Of This Support,
Our Vision Of The Future Is...

The Naval Avionics Center Will Be Recognized
As The Leader In Avionics And Manufacturing Excellence

Vision/Mission/Values Example

Naval Aviation Depot

Cherry Point

Given the DON vision statement, NADEP Cherry Point took it and developed a specific vision statement for their organization:

"To provide our nation with aviation depot maintenance, engineering and other logistics support."

Cascading the Vision

The
Big
Picture

Cascading the Vision

How to Communicate Vision

- Common strategic language

- Simplicity/specificity

- Testing for understanding

- Repetition

- Relevance

Cascading the Vision

Mediums for Strategic Message

- No one best medium to express vision

- Array of alternatives

- Little need to invent new ones

In Summary

- Visions Create Enthusiasm

- Visions Inspire

- Visions Unite

- Visions Direct

TOTAL QUALITY
MANAGEMENT

MODULE SIX

ESTABLISH

THE

INFRASTRUCTURE

Module Six Objectives

Upon completion of this module, the participant will be able to:

- Discuss the implementer's role in supporting the infrastructure

- Specify the types of infrastructures that are necessary for successful TQM implementation

- Describe the functions of ESCs, QMBs and PATs

- Describe the actions necessary for establishing the TQM infrastructure.

TQM

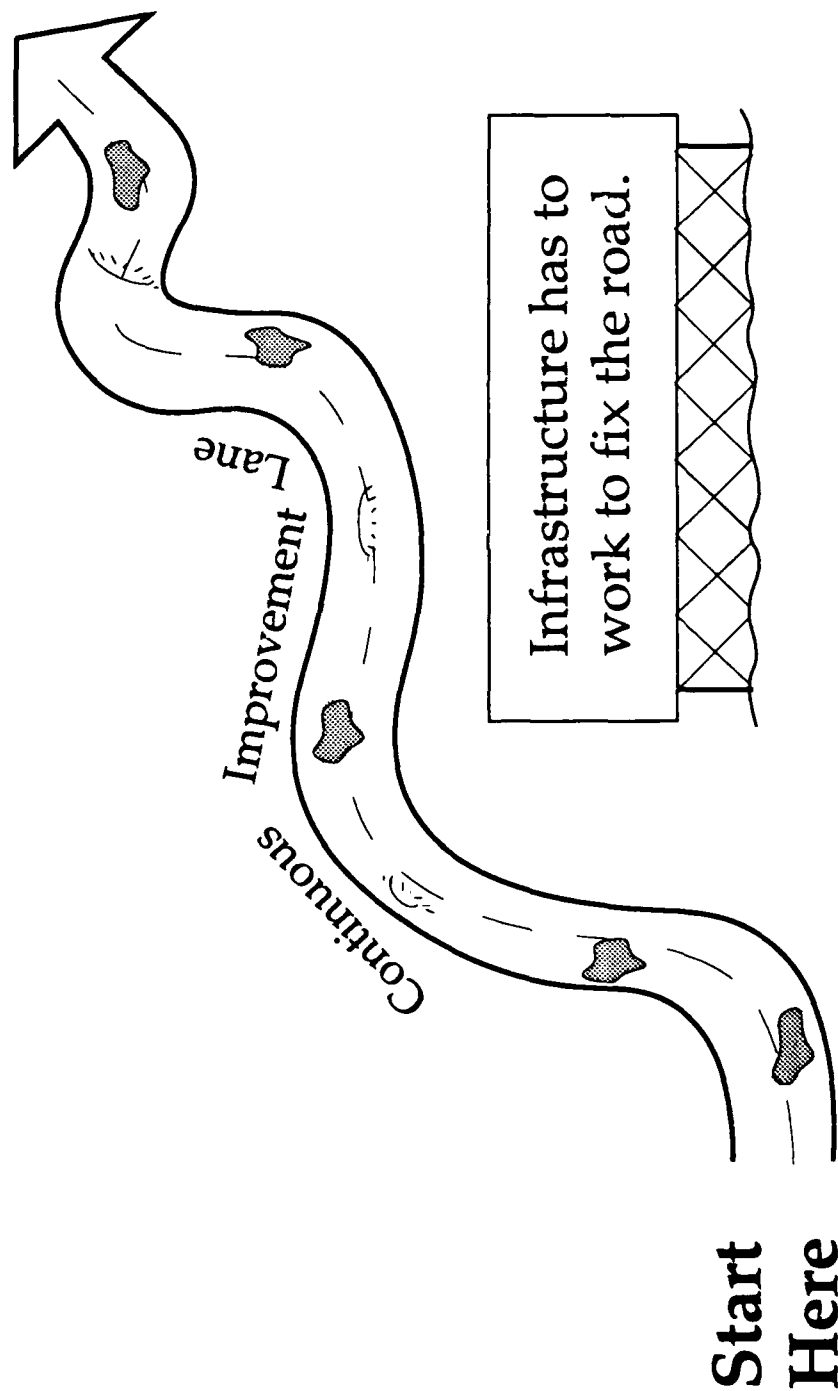*TOTAL QUALITY MANAGEMENT*

The Implementer's Role

- Assist structures getting established

- Educate managers and employees regarding infrastructure activities and goals

- Publicize and provide information regarding infrastructure accomplishments.

Establish
Infrastructure

TQM TOTAL QUALITY MANAGEMENT

The TQM Infrastructure

Goals

Continuous Improvement Lane

Infrastructure has to work to fix the road.

Start Here

6-4

TOTAL QUALITY
MANAGEMENT

Functions of the Executive Steering Committee (ESC)

- Develop philosophy, constancy of purpose, and guiding principles

- Focus on critical processes that affect customer satisfaction and/or major cost

- Identify an "owner" of each critical process

- Resolve organizational and functional barriers

- Provide resources, training and rewards

- Establish criteria for measuring outputs/customer requirements

- Measure progress vs. goals.

TOTAL QUALITY
MANAGEMENT

Functions of Quality Management Boards (QMBs)

- Identify processes in assigned issue area

- Prioritize processes by improvement potential

- Establish Process Action Teams when appropriate

- Provide Process Action Teams with training

- Develop improvement plans, methodology, and metrics to measure progress vs. goals

- Track and report progress and provide help if necessary

- Help remove barriers.

Functions of Process Action Teams (PATs)

- Involve those who do the work in the improvement process

- Apply a structured performance improvement methodology to deal with specific process problems and identify improvement changes

- Recommend solutions and measurement systems for process control and feedback to the QMB.

Establishing the TQM Infrastructure

Top Management (ESC) Broad Area

- Acquisition
  - Philosophy
  - Relationships between government and industry

Mid Level (QMB) More Specific

- Establishing analytical rigor
- Identifying acquisition system elements
- Focusing efforts of PATs

Action Worker (PAT) Detailed

- Analyzing a specific type of acquisition
- Detailed documenting of process
- Recommending improvements

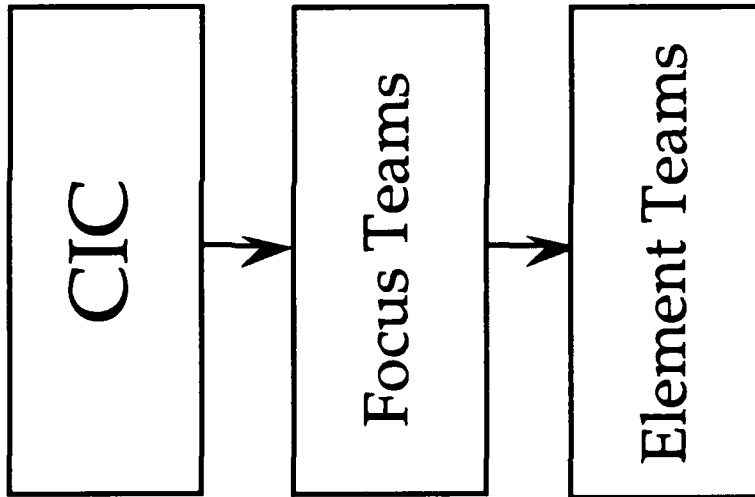## Establishing the TQM Infrastructure

Naval Avionics Center

"ESC"

CIC

- Senior Managers
- Establish focus areas

"QMB"

Focus Teams

- Chaired by CIC member
- Crossfunctional membership
- Define elements

"PAT"

Element Teams

- Lead by focus team member
- Address issues

TOTAL QUALITY
MANAGEMENT

In Summary

- Executive Steering Committees identify and **prioritize** improvement issue areas *(the "why")*

- Quality Management Boards identify improvement **opportunities** *(the "where")*

- Process Action Teams are responsible for specific process problems and resolving issues *(the "how")*

- Shift from a hierarchical structure to customer focused, cross-functional teaming

MODULE SEVEN

IDENTIFY PROCESS IMPROVEMENT OPPORTUNITIES

TOTAL QUALITY
MANAGEMENT

TQM
iQM

Module Seven Objectives

Upon completion of this module, the participant will be able to:

- Identify criteria for selecting TQM implementation projects

- Understand the importance of systematic procedures for generating improvements

- Identify actions necessary for establishing a system for identifying improvement opportunities

- Identify tools and techniques used in process improvements

- Explain the importance of developing a clear problem statement

- Write a properly structured problem statement.

TOTAL QUALITY
MANAGEMENT

The Implementer's Role

- Drawing out individual workers' motivation

- Bringing together process players

- Analyzing the input from individuals and teams to determine viewpoints

- Clarifying improvement opportunities by writing problem statements

Identify Process
Improvement
Opportunities

Participant Exercise

Card Coordination Corporation (CCC)

Vision Statement

The Corporation is dedicated to provide our customers with only quality card sets and to continuously improve our processes to stay competitive. CCC is also dedicated to the development and well-being of our employees.

TQM TOTAL QUALITY MANAGEMENT

Developing Criteria

- Define each selected criteria

- Rank the criteria

- Rate the items

- Develop project selection matrix

TOTAL QUALITY
MANAGEMENT

Developing Criteria

Tools and Techniques

- Cost-Benefit Analysis

- Stakeholder Analysis

TOTAL QUALITY
MANAGEMENT

Systems and Procedures

- Screening Committee review

- Formal search for opportunities/suggestion system

- Direct ESC/QMB solicitation

- Other avenues for generating ideas (group meetings, quality presentations, quality circles, etc.)
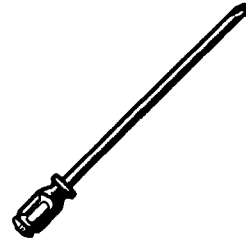
Tools and Techniques
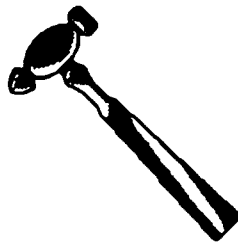
- Brainstorming
- Interviews
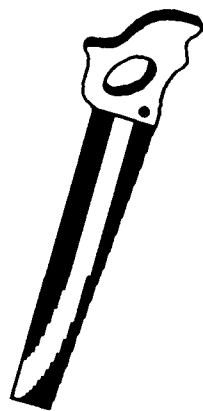- Sampling
- Survey and Questionnaire
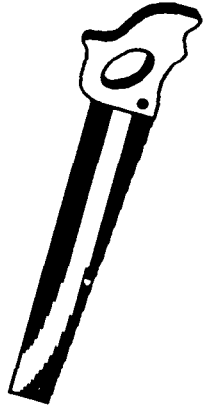
- Cause and Effect Diagrams
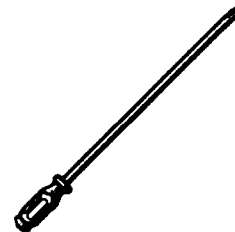- Work flow Diagrams
- Check Sheets
- Cost Estimation

Tools and Techniques

- Pareto Diagram

- Histogram

- Run Charts

- Control Charts

- Scatter Diagram

The Problem Statement

- Requires clarity and objectivity

- Describes in specific, concrete terms what is wrong

- States the effect of the problem

- Focuses on how people are affected

- Measurable

- Specific

- Positive

In Summary

- Innovation can be encouraged; it cannot be mandated.

- Implementers have to help the system install improvements.

- Implementers must help individuals and teams convert their ideas into reality.

TQM

TOTAL QUALITY MANAGEMENT

MODULE EIGHT

IMPLEMENT PROCESS ACTION TEAM RECOMMENDATIONS

Module Eight Objectives

Upon completion of this module, the participant will be able to:

- Identify the roles and responsibilities of the implementer in carrying out the implementation plan

- Identify the components of an action plan for implementing PAT recommendations

- Develop a plan to prepare for implementation efforts.

The Implementer's Role

You are responsible for assisting PATs/QMBs develop and present the implementation plan to management. You should:

- Provide information about availability of resources

- Provide information about the parties that should be contacted and their roles in the implementation effort

- Help to identify and overcome barriers.

Implement PAT
Recommendations

Development of the Plan

Steps in the development process:

- Develop PAT recommendations into an implementation plan

- Prepare offices in your functional area for the implementation

Steps in the implementation process:

- Implement the plan

- Track and monitor implementation efforts.

Case Study

THE PROBLEM

The correspondence process throughout your organization is not meeting customer requirements. There is a tremendous amount of correspondence that must be reworked. These cycles of rework result in employee, customer, and supplier frustration.

TOTAL QUALITY
MANAGEMENT

Case Study

Getting the Policy Package Through

> SECDEF

> USD (X)

> Office B

> Office C

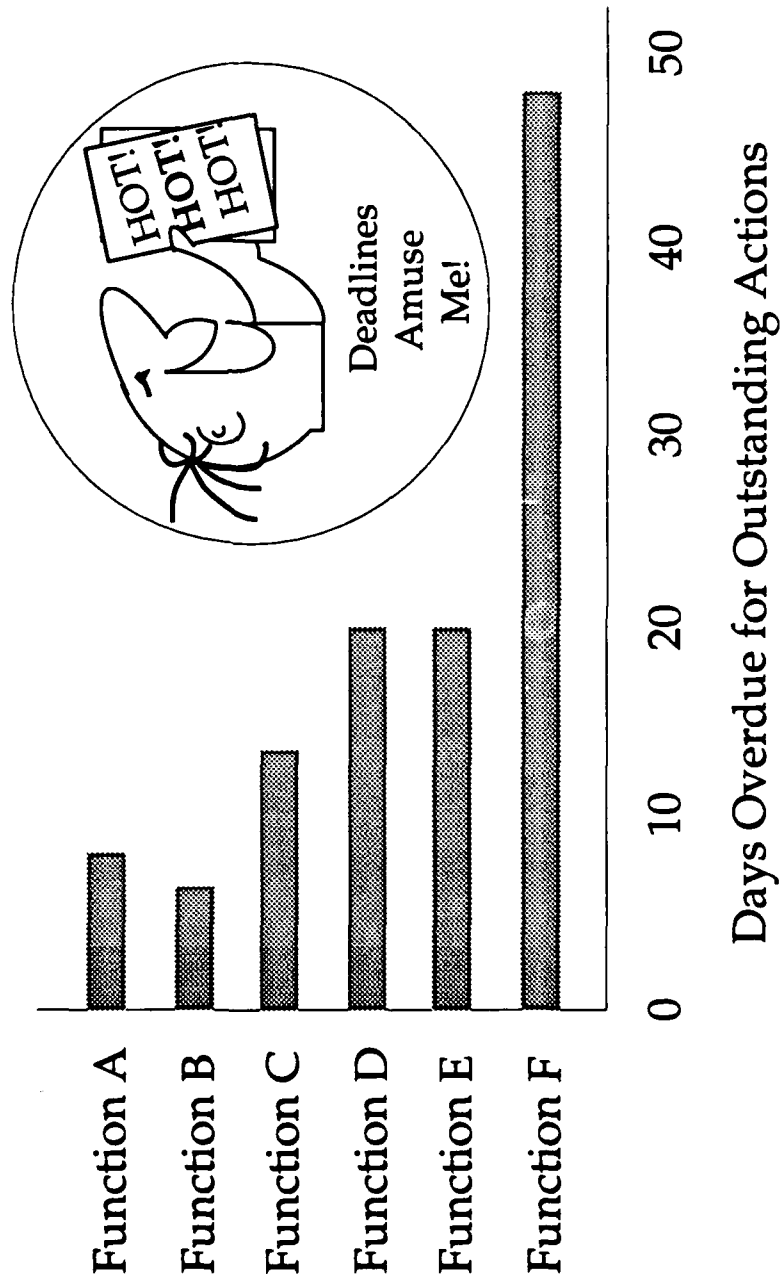> Office D

> Office E

> Office F

Suspensed Correspondence

Case Study

Typical Breakout of OSD Activity for Suspensed Correspondence

Completed
5%

Extension
Filed
35%

No Action
Required
34%

Correspondence
Transferred
26%

Case Study

Average Time Overdue by Category

Deadlines
Amuse
Me!

HOT!
HOT!
HOT!

Function A
Function B
Function C
Function D
Function E
Function F

0   10   20   30   40   50

Days Overdue for Outstanding Actions
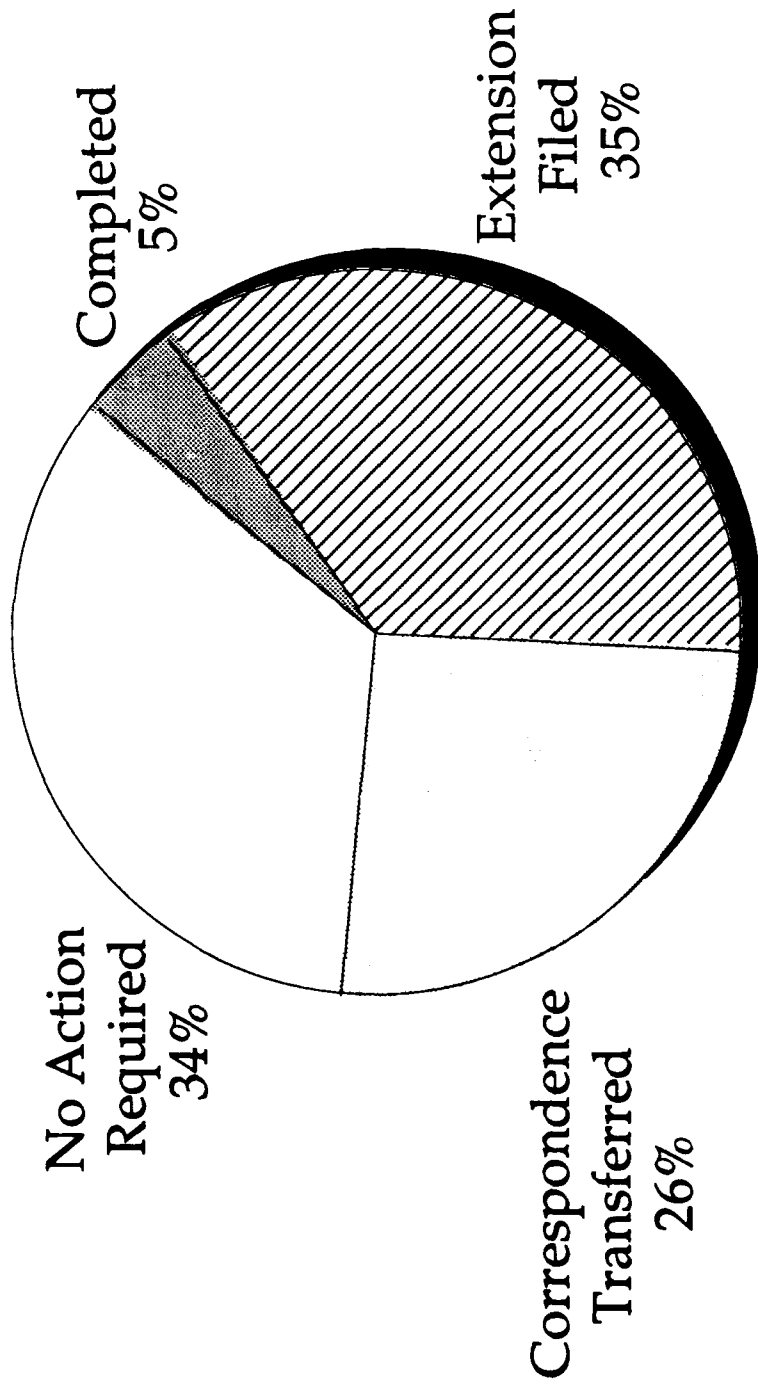
Case Study

Percent Overdue by Category

In Summary

The following areas have been discussed in this module:

- Roles and responsibilities of the implementer in carrying out process improvement implementation efforts

- Components of an action plan for implementing PAT recommendations

- Preparing for implementation efforts.

TOTAL QUALITY
MANAGEMENT

MODULE NINE

EVALUATE AND RECYCLE

Module Nine Objectives

Upon completion of this module, the participant will be able to:

- State the implementer's role in evaluating and recycling process improvement efforts

- Identify the four levels at which TQM evaluation may be done and state appropriate indicators

- Describe the role of recycling in the TQM process

- Identify approaches which contribute to continuous improvement and recycling.

TOTAL QUALITY
MANAGEMENT

The Implementer's Role

- Develop and communicate approaches which may assist in evaluation and recycling

- Communicate with those responsible for evaluation and recycling on ESC and QMB

- Support ESC and QMB evaluation and recycling efforts

- Assess progress and pro-actively contribute to identifying improvement opportunities

- Identify organizational goals not being met at the lower levels

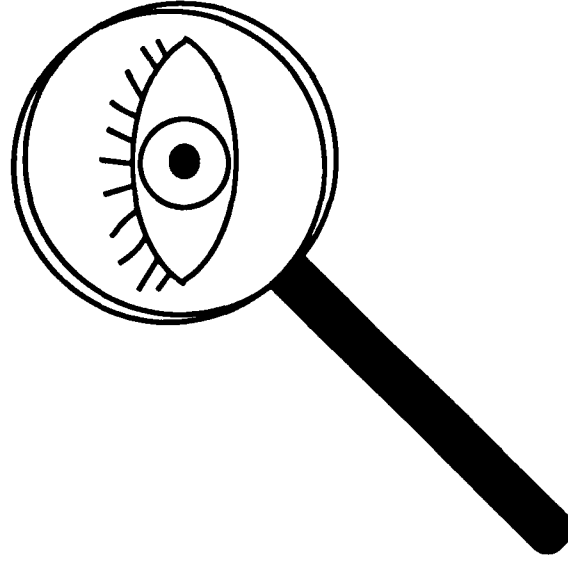- Look for unbalanced priorities in cross-functional actions.

Levels of TQM Evaluation

Four Evaluation Areas

- Overall organizational TQM processes

- Work processes

- Quality projects

- Team effectiveness

Levels of TQM Evaluation

Organizational TQM Processes

- Customer satisfaction
- Management system
- Analysis and use of data for decision making
- Quality planning process
- Employee involvement
- Quality education and training
- Use of process measures
- Quality of products

TOTAL QUALITY MANAGEMENT

Levels of TQM Evaluation

Work Processes And Quality Projects

- Relation to customer needs
- Process measures available and used consistently
- Documented improvements in process or work capabilities
- Documentation of processes for "knowledge preservation"
- Quality assurance processes

Levels of TQM Evaluation

How to Evaluate Team Effectiveness

A team can be assessed in relation to its achievements of group goals, innovations developed and implemented, and documented improvements resulting from team activity.

Evaluation

Monitoring Techniques

- Check sheets

- Histograms

- Run charts

- Control charts

TQM

Recycling

TQM

- A <u>journey</u>, not a destination

- Requires constant attention

- Continuously evolves

- A way of life

Recycling

Continuous Improvement Requirements

The implementer should recognize this shifting pattern of improvement and consolidation and the necessity for disciplined action at all levels to ensure TQM improvement is sustained.

Improve   Entrench   Improve   Entrench   Improve   Entrench

TOTAL QUALITY
MANAGEMENT
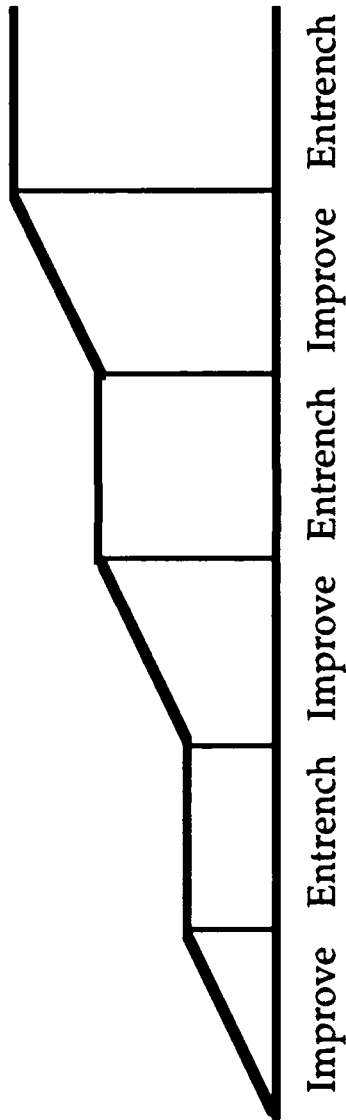
In Summary

- Evaluation

  - Clear measures of merit
  - Consistent measurement

- Recycle

  - Consolidate the gains
 - Reinforce them

MODULE TEN

TRAINING

Module Ten Objectives

Upon completion of this module, the participant will be able to:

- Assist the Training/Quality office in developing the guidelines for a needs assessment

- Identify the types of training courses necessary for a TQM transformation

- Discuss the criticality of training to implementation success.

The Implementer's Role

- Baseline personnel
- Determine priorities
- Set budget
- Schedule training
- Organize team training when possible
- Reinforce training back on the job
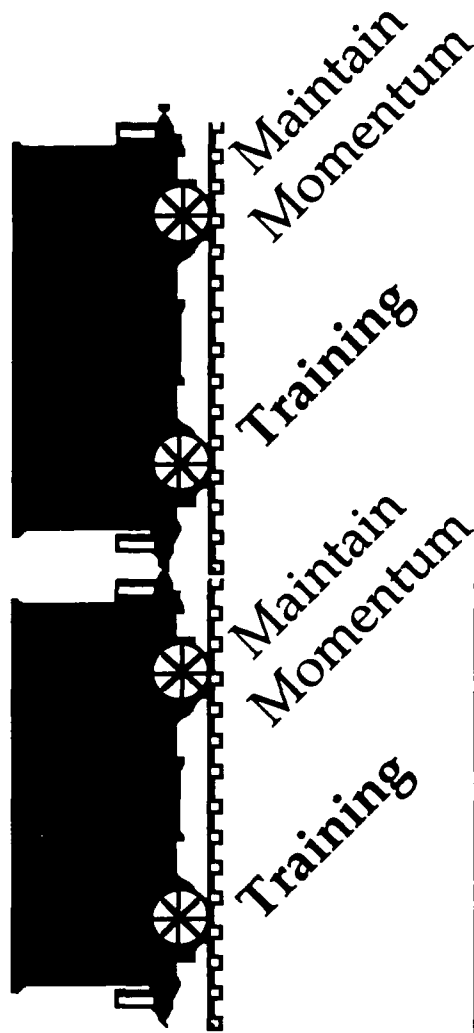
Maintain Momentum

Training

Maintain Momentum

Training

Needs Assessment
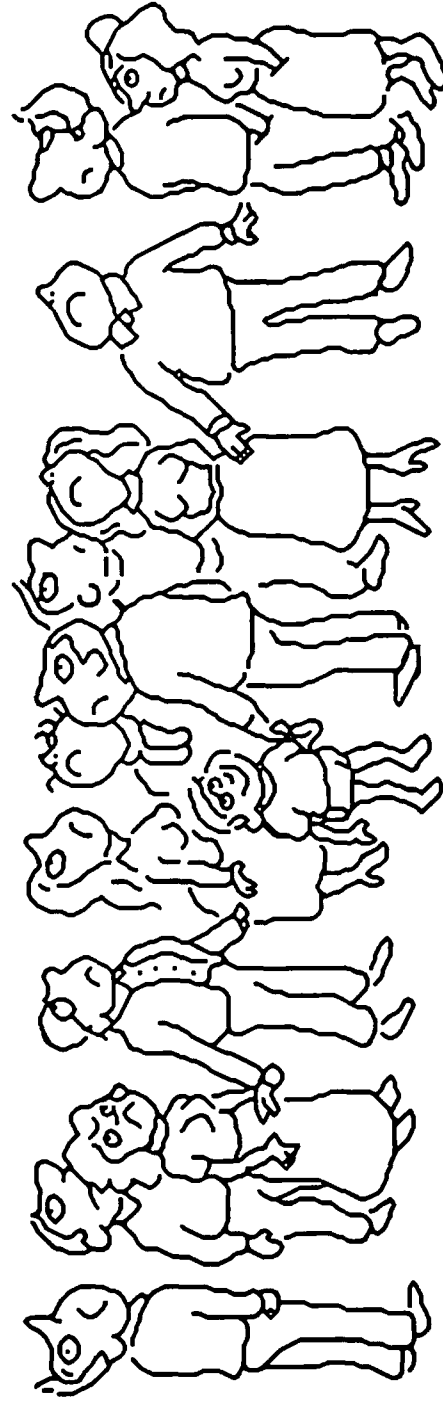
- Provides a roadmap for directing training efforts.

- Helps identify the extent of training needed.

- Helps establish training priorities.

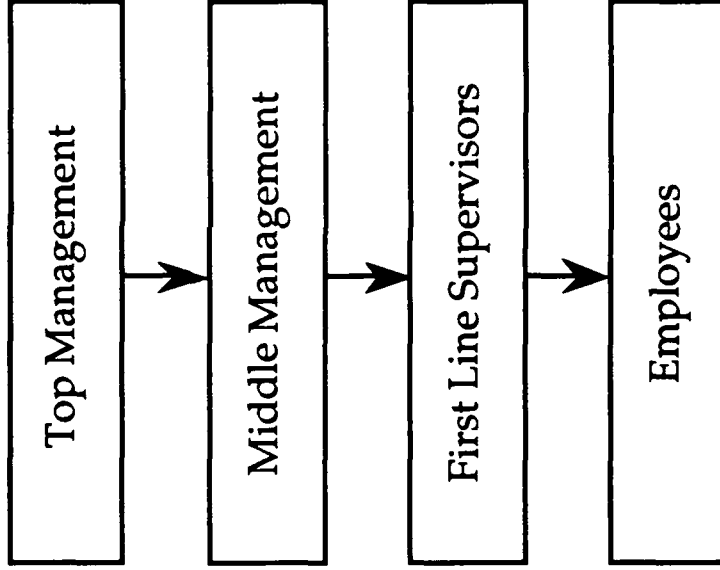- Has to be done on a regular basis.

TOTAL QUALITY
MANAGEMENT

Awareness Training

Everyone in an organization needs to have a basic understanding of what is happening in the organization, in order to reduce anxiety and resistance to change.

TOTAL QUALITY
MANAGEMENT

Awareness Training

Awareness training should follow this path:

```
┌──────────────────┐
│  Top Management  │
└──────────────────┘
         │
         ▼
┌──────────────────┐
│ Middle Management│
└──────────────────┘
         │
         ▼
┌──────────────────┐
│First Line Supervisors│
└──────────────────┘
         │
         ▼
┌──────────────────┐
│    Employees     │
└──────────────────┘
```

ESC Training

KNOWLEDGE, SKILLS, and ABILITIES

1. Establishing a quality culture.
2. Managing TQM.
3. Statistical thinking.
4. How to make decisions by consensus.
5. Identifying and prioritizing organizational issue areas.
6. Understanding the importance and application of experimental design.
7. How to select projects that have the most significant impact on the organization.
8. How to set up a reward and recognition system that reflects quality principles.
9. Managing change.
10. Establishing a climate that encourages risk taking and innovative thinking.

QMB Training

KNOWLEDGE, SKILLS, and ABILITIES

1. In-depth understanding of TQM concepts, tools and techniques.
2. Analyzing the organization for project selection.
3. Cross-functional management.
4. How to reward and recognize TQM accomplishments.
5. Implementing a quality culture.
6. Statistical Thinking.
7. How to make decisions by consensus.
8. Removing barriers
9. Advocating cultural process change.
10. Working effectively with labor unions.
11. Establishing project and employee selection guidelines.
12. Experimental design.
13. Tracking Effectiveness.

PAT Training

KNOWLEDGE, SKILLS, and ABILITIES

1. The efficacy of working on teams.
2. The benefits to the organization and the individual
3. Agenda setting
4. Meeting management
5. Consensus decision making
6. Brainstorming
7. Pareto Analysis
8. Cause and effect analysis
9. Data collection

10. Flow Charting
11. Effective interviewing techniques
12. Survey techniques
13. Activity analysis
14. Process analysis
15. Problem solving techniques
16. Making management presentations
17. Simple sampling techniques

Skill Training: Quantitative Methods

Basic training in statistics for PATs usually covers the following types of activities:

1. A review of TQM principles
2. The Plan-Do-Check-Act (PDCA) of the process improvement
3. An elemental review of statistical theory.
4. The influence of special and common causes on process variation
5. Exercises on central tendency measures and variation

6. Flow charting
7. Cause and effect diagrams
8. Check sheets
9. Histograms
10. Pareto charts
11. Scatter diagrams
12. Run charts
13. Control charts

Skill Training: Group Dynamics

Typical Group Dynamics training usually includes content that addresses the following KSAs:

1. An explanation of group dynamics

2. Impact of group dynamics on TQM groups

3. A discussion/assessment of leadership styles

4. Group dynamics (process) tasks versus problem-solving (content) tasks

5. Barriers and benefits to working in groups

6. Helping or hindering group behaviors

7. Stages of group development

8. Maximizing group participation

9. Role definitions

10. Goal clarification

11. Establishing ground rules

12. Preventing group floundering

13. Teambuilding

Job Related Training

Some examples of job related training that may be needed:

1. Job instruction training
2. Effective use of personal computers
3. How to develop quality specifications and standards
4. Meeting management
5. Decision-making
6. Managing change

7. New leadership principles
8. Coaching
9. Teambuilding
10. Optimizing human resources
11. Paperwork simplification
12. Time management
13. Cost of poor quality
14. Writing

TQM *TOTAL QUALITY MANAGEMENT*

THE TOTAL ORGANIZATION

- <u>GO</u> beyond awareness training

- Make sure new employees <u>GET</u> TQM awareness training

How Should Training Be Conducted?

Awareness and Specific Skills Training Should be Taught by the Following:

- Quality experts
- In-House staff
- Academic Institutions
- Managers
- Private sector

- DOD schools
- Other organizations within Federal government
- State and local governments
- Contractors

Resources Available

FEDERAL QUALITY INSTITUTE

- Provides quality awareness seminars and follow-up to top officials and senior executives to encourage management understanding of and commitment to TQM

- Provides agencies with assistance in implementing TQM by making available to them a roster of qualified private sector consultants through a Federal supply schedule contract

- Maintains a quality and productivity information center, which has an extensive library of materials on quality practices and training.

Resources Available

DEFENSE SYSTEMS MANAGEMENT COLLEGE

Offers Several

Courses On TQM

For Managers

TOTAL QUALITY
MANAGEMENT

Training in a TQM Organization

MATURE TRAINING PROGRAMS

- Systematic

- Constant improvement

- High percentage of personnel trained

Training in a TQM Environment

Too often employees are placed in new assignments where they are:

- Untrained

- Unmotivated - not inspired by challenge of job

- Unsure of themselves

TOTAL QUALITY
MANAGEMENT

In Summary

A TQM TRAINING PROGRAM

- Based on Needs Assessment

- Provided from Top-Down

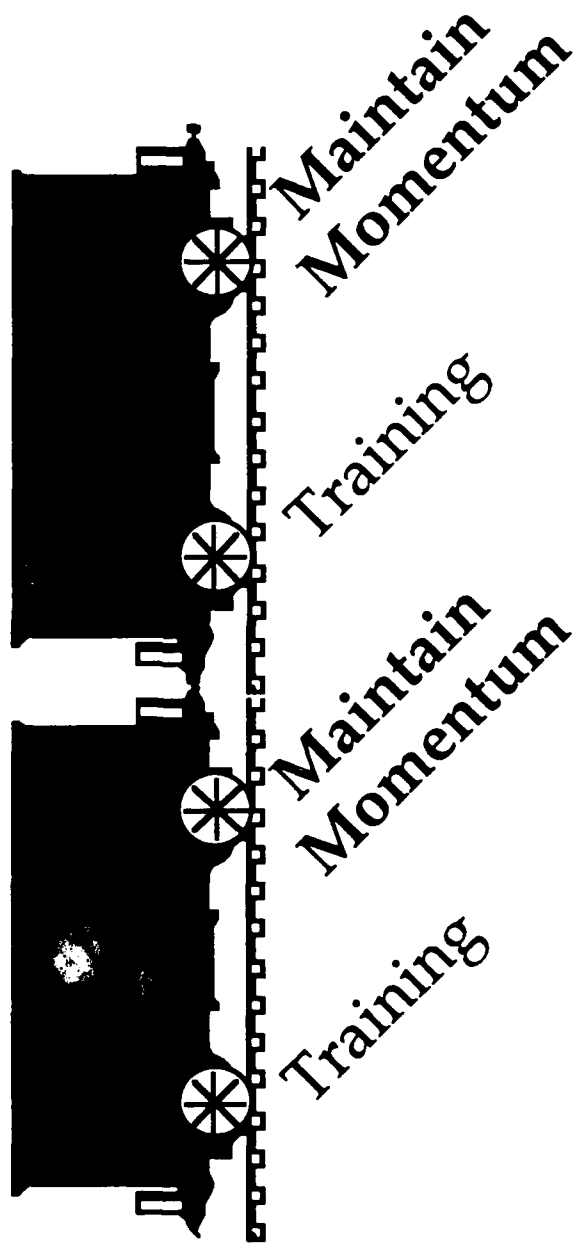- Emphasis on Team Training

- Across the Organization

MODULE ELEVEN

MAINTAIN
MOMENTUM

Module Eleven Objectives

Upon completion of this module, the participant will be able to:

• Initiate momentum to support TQM transformation

• List criteria for a recognition program to build TQM support

• Implement methods to incorporate TQM into daily activities

• Institutionalize infrastructure mechanisms to accommodate infusion of new personnel and turnover

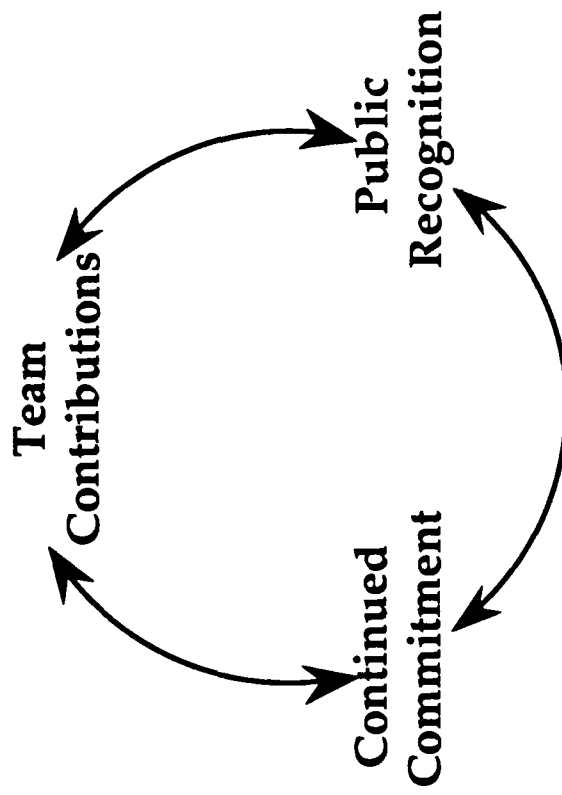• Initiate TQM expansion into other parts of the organization.

The Implementer's Role

Training   Maintain Momentum   Training   Maintain Momentum
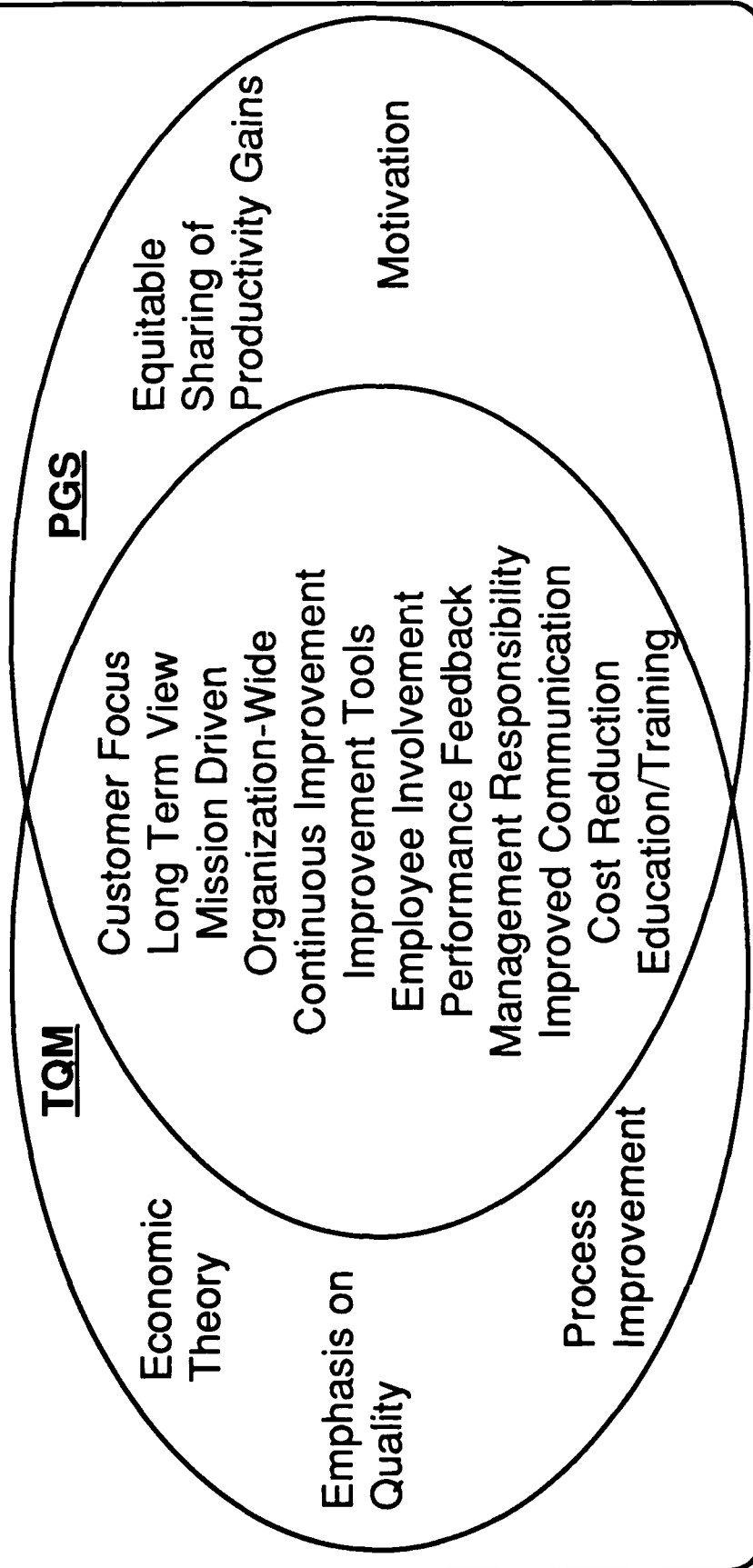
Initiate Momentum

- Utilize a "Breakthrough Strategy" to gain immediate success and momentum using key managers who support TQM

- Concentrate efforts and resources on small processes where TQM application can have immediate success

- Concentrate activity and training on the individuals most closely associated with the processes

- High resistance equals low probability of success.

Develop A Recognition Program

Develop A Recognition Program

HOW PRODUCTIVITY GAIN SHARING AND TQM RELATE

TQM

PGS

- Economic Theory
- Emphasis on Quality
- Process Improvement

- Customer Focus
- Long Term View
- Mission Driven
- Organization-Wide
- Continuous Improvement
- Improvement Tools
- Employee Involvement
- Performance Feedback
- Management Responsibility
- Improved Communication
- Cost Reduction
- Education/Training

- Equitable Sharing of Productivity Gains
- Motivation

Develop A Recognition Program

GOALS

The goals of the recognition program that the Quality Management Board should develop are:

- A formal process to evaluate and reward employees for both individual effort and team efforts.

- A multi-level recognition program that progresses in significance and attention based on the scope of the achievement. The multi-level approach will provide meaningful recognition that can respond to all types of achievements and be flexible enough to provide recognition with a minimum of administrative processing.

Develop A Recognition Program

Establishing a Recognition Program requires a formal selection and evaluation process that should apply the following criteria:

- Timely

- Tied to a specific, observable accomplishment

- Require minimal documentation

- Promote and recognize both group and individual achievements.

TQM TOTAL QUALITY MANAGEMENT

Develop A Recognition Program

The program should be related to the following activities:

- Customer relationships
- Teamwork/cross-functional cooperation
- Innovation
- Risk-taking
- Process improvements

TQM

Develop A Recognition Program

Evaluate and choose the types of rewards that will best suit the needs of your organization:

- <u>Monetary</u>: outstanding contribution, consistently high standard, etc.

- <u>Non-monetary</u>: trips to customer locations, divisional recognition meetings, special parking spaces, articles in newsletter, annual conferences, verbal recognition, special job assignments, plaque, luncheons, etc. Rewards must be <u>meaningful.</u>

TQM Infusion

Incorporate TQM into the daily activities of the workforce by:
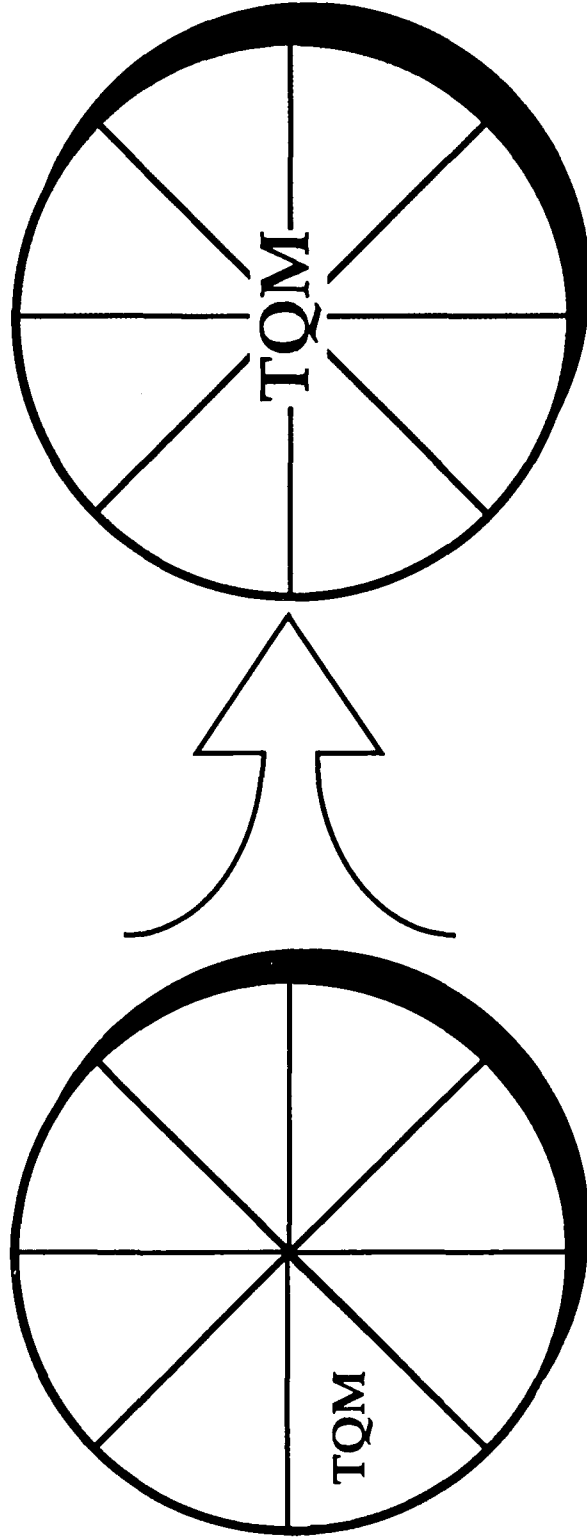
- Publicizing information on the progress of TQM efforts to stimulate employee empowerment and ownership

- Incorporating TQM responsibilities and practices in job descriptions and performance appraisals

- Demonstrating commitment through tangible actions in addition to written policies and speeches. The workforce judges commitment of management by their behavior. Top leadership in the work place is one of the most effective means of transmitting commitment. They should make regular visits--not publicity events.

Institutionalize TQM

- Members and groups involved in ESCs, QMBs and PATs should be rotated in order to institutionalize the infrastructure mechanisms.

- Orientation of new personnel should include awareness of the TQM infrastructure.

- The key is to transport success/improvements to other organizational units and facilities. Implementers should work to transfer "lessons learned" during their process improvement efforts.

TQM
TOTAL QUALITY
MANAGEMENT

Spread TQM

THE TQM VIRUS

Spread TQM

- Communicate TQM successes to other parts of the organization

- Share lessons learned

- Seek the participation of the key individuals in a QMB or PAT

- Assist other organizations in establishing vision, infrastructure, etc.

TQM

TOTAL QUALITY
MANAGEMENT

In Summary

This module covered the following:

- Strategies for initiating momentum of TQM transformation

- Criteria for developing recognition program to build and sustain support

- Strategies for institutionalizing the infrastructure mechanisms to withstand changes in personnel

- Strategies for expanding TQM into other parts of OSD.