Methods for Managing Quality

Overview

Methods for Managing Quality

Course Overview

Overview, Viewgraph 1

Introduction

Organizations differ in their missions, work processes, personnel, resources, capabilities, opportunities, and constraints. Due to these and other differences, each command will have a slightly different approach to transforming the organization through quality principles and tools. Despite these differences, there are common elements that should be present in every organization's Total Quality Leadership (TQL) implementation strategy. For example, every organization will need to consider what preparation is required to implement TQL, what roles members of the organization will play, what structure to adopt, what the relationship between the various elements will be, how process improvement efforts will be developed and managed, how an enabling environment will be created, and so on.

The Department of the Navy (DON) TQL unit implementation approach is designed to provide organizations with a structured approach to address these and other issues concerning TQL implementation.

Course Purpose Statement

To provide knowledge and skills for application of process management and associated tools. Applying these methods will significantly improve the organization's mission performance and readiness.

Overview, Viewgraph 2

The purpose of this course is to provide the participant with the knowledge and skills to apply process management and the associated tools in their organization. Thoughtful application of these methods will have a significant positive impact on the organization's readiness and its ability to perform its mission.

Course Structure

- **Course Overview**
- **Module 1 - Process Management Flowchart (Steps 1 through 5)**
- **Module 2 - Process Management Flowchart (Steps 6 and 7)**
- **Module 3 - Process Management Flowchart (Steps 8 through 11)**
- **Course Summary**

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Overview
Learning Objectives

By the end of the lesson, participants will be able to:

- Describe the activities required to establish process management in Phase I implementation efforts
- Recognize the Process Management Flowchart and its relationship to the Integrated Team Model

Overview, Viewgraph 4

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Upon completion of this lesson, participants will be able to:

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Elements of Phase I

- ◆ Establish a Critical Mass
- ◆ Top Leaders Trained and Committed
- ◆ Select and Train TQL Coordinator
- ◆ Select and Train ESC
- ◆ Initial Implementation Plan
- ◆ Define the Organization
- ◆ Begin Process Management

Overview, Viewgraph 5

Elements of Phase I

As presented in the DON's *Implementing TQL* course, the following elements of Phase I of the DON TQL unit implementation approach will be briefly introduced and discussed .

- **Establish a Critical Mass**
- **Top Leaders Trained and Committed**
- **Select and Train TQL Coordinator**
- **Select and Train the Executive Steering Committee**
- **Initial Implementation plan**
- **Define the Organization**
- **Begin Process Management**

- **Establish a Critical Mass**

The critical mass begins to be established as the top leader forms an Executive Steering Committee (ESC) to lead and guide the transformation, and selects a TQL coordinator to advise and assist the top leaders in the transformation.

- **Top Leaders trained and committed**

The CO, XO, and CMC attend the DON's *Senior Leaders Seminar* (SLS). This seminar provides the formal training necessary for the top leaders to gain knowledge of Total Quality Leadership to begin implementation efforts.

- **Select and train TQL Coordinator**

The top leader of the organization selects the coordinator and provides resources to for the coordinator's education. The TQL Coordinator attends the DON's prescribed TQL training pipeline: *Fundamentals of TQL, Implementing TQL, Team Skills and Concepts, Methods for Managing Quality, and Systems Approach to Process Improvement*. The Coordinator's primary responsibility is training and guiding the Executive Steering Committee through TQL implementation activities.

- **Select and train the Executive Steering Committee (ESC)**

The top leader selects the members of the Executive Steering Committee. Once formed, they attend training held by the TQL Coordinator. At a minimum, this should include *Fundamentals of TQL* training (32 hours), with all members in attendance. The Coordinator provides additional just-in-time (JIT) training (e.g., team skills, tools) to the ESC as they begin efforts to implement TQL in their command.

- **Initial Implementation Plan**

Once the ESC is trained, top leaders demonstrate top-down commitment by developing a Phase I implementation plan. The implementation plan serves as a road map for the organization's quality efforts. Its purpose is to describe the specific actions and steps required to establish a "quality system". By developing an implementation plan, the organization's leaders are committing to take action that will enable the establishment of process management. Top leaders should recognize the implementation plan as a "living document". The plan will continue to improve over time as new knowledge is gained and the organization evolves.

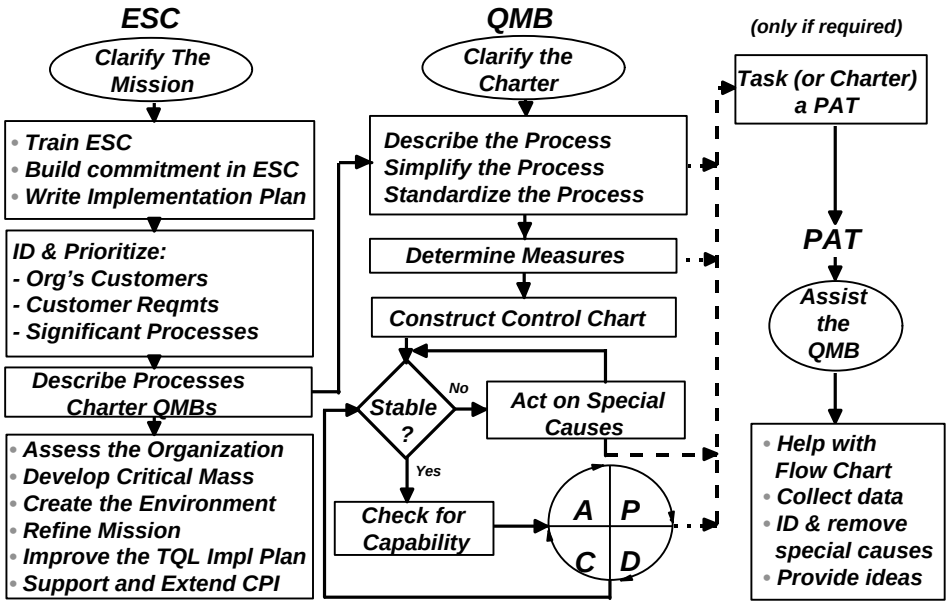
- **Define the Organization**

In order to work toward the aim of improving mission performance, the ESC must agree on what the organization's mission is. In keeping with Deming's point number one, "Create and publish to all employees a statement of the aims and purposes of the...organization," the ESC publishes a mission statement that delineates "who we are," "what we do," and "for whom we do it." Then the ESC develops a Quality Philosophy, providing fundamental guidance on why and how the organization will pursue quality.

- **Begin Process Management**

The organization's primary emphasis during Phase I is to establish and promote continual process improvement throughout the organization. This means working on "all the significant processes within the organization." Initially, the ESC may need to do a Pilot Project to practice what they have learned and to understand how to effectively manage process improvement within the organization. Pilot Projects are the initial process improvement activities and must be nurtured by the ESC for successful results.

Integrated Team Model

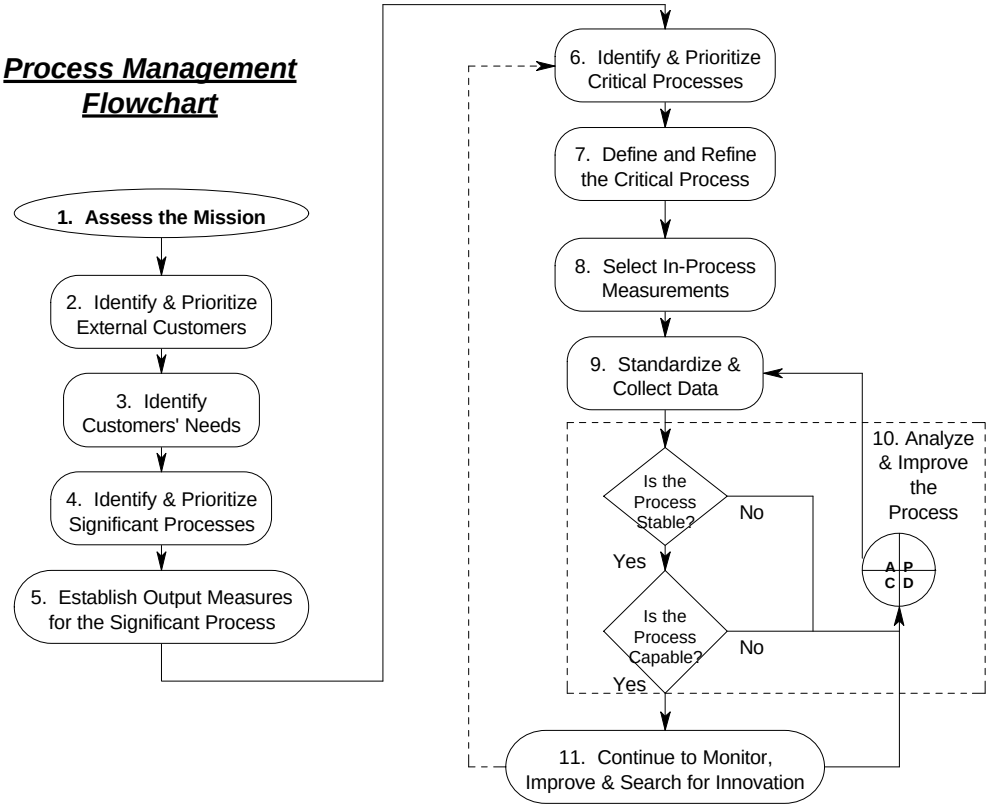


Overview, Viewgraph 6

This diagram shows the activities of quality improvement teams within an organization. This figure is not intended to follow all the normal rules for a flow chart. It doesn't necessarily show all of the actions organizations must take to implement total quality nor is it a rigid model for process management. It is just to help you understand how the teams' process improvement activities are connected.

We will see that Steps 1 through 5 of the **Process Management Flowchart** reflect some of the ESC activities shown here. In assessing/defining the organization's mission, the ESC identifies the command's major products and services, external customers, and the core processes that produce those products for the customers (significant processes). They charter a cross-functional process management team (QMB) for each of the significant processes.

Steps 6 through 11 then reflect the QMB and PAT activities that follow the chartering of QMBs.



Overview, Viewgraph 7

Process Management Flowchart

Brief overview of the Process Management Flowchart:

- **Step 1. Assess the Mission**

The ESC writes or revisits the organization’s mission statement.

- **Step 2. Identify and Prioritize External Customers**

The ESC identifies the organization’s end-users.

- **Step 3. Identify Customers’ Needs**

The Customer Needs Form is used to identify and prioritize customer needs and to rate the command’s performance in meeting those needs.

- **Step 4. Identify and Prioritize Significant Processes**

The ESC identifies the cross-functional processes required to accomplish the mission.

- **Step 5. Establish Output Measures for Significant Processes**

Key Quality Characteristics Worksheets operationally define the customers' needs and identify quality characteristics for output measurements.

- **Step 6. Identify and Prioritize Critical Processes**

The critical process that is deemed most important to improve first is selected in this step.

- **Step 7. Define and Refine the Critical Process**

A QMB breaks the process down from a Macro to a Mini or a Micro-level flowchart.

Complexity in the existing process is identified and removed (where possible).

- **Step 8. Select In-Process Measurements**

Key Quality Characteristics Worksheets and Process Measurement Charts are used to establish in-process measurements.

☞ **INSTRUCTOR NOTE.** Take this opportunity to point out that the Process Management Flowchart depicts the Plan-Do-Check-Act (PDCA) cycle of process management. Steps 1 through 8 represent the Plan phase, typically the most extensive phase of the PDCA.

- **Step 9. Standardize and Collect Data**

Process procedures are standardized in SOP and training for all workers involved in the process; measurement tools are in place to monitor the process for standardization.

☞ **INSTRUCTOR NOTE.** Step 9 represents the Do phase of the process management PDCA.

- **Step 10. Analyze and Improve the Process**

- **Is the Process Stable?**

A process in which variation in outputs arises only from common causes is considered stable. A process that is stable is predictable. If the process is not stable, process workers act on special causes and Step 9 is repeated. If the process is stable, the next step is to determine capability.

- **Is the Process Capable?**

A process that is stable and meets customer needs is considered capable. If the process is not capable, the QMB works to improve the process and repeats Step 9. If the process is capable, the QMB goes on to Step 11.

☞ **INSTRUCTOR NOTE.** Step 10 represents the Check phase of the process management PDCA. Step 10 includes a process improvement PDCA nested in the larger process management PDCA. The paths exiting Step 10 (to Step 9 or 11) represent the Act phase of the process management PDCA.

- **Step 11. Continue to Monitor, Improve, and Search for Innovation**

Once the process is stable and capable, you must communicate with your customers to learn their new needs. Customers are now learning what is meant by quality in products and services; their needs will change as they learn. The organization will learn and change and should strive toward exceeding customer needs and expectations. New ideas will produce new customers. As resources permit, the QMB may return to Step 6 to select the next critical process.

☞ **INSTRUCTOR NOTE.** Check the class for understanding of the introductory material presented thus far, and their readiness to proceed into the model.
