

# **Fundamentals of Total Quality Leadership**

## **Module 1: DON Quality Approach**

# Student Information

## Lesson Outline

Student Information	1-1
VG-1 DON Quality Approach	1-3
VG-2 Learning Objectives	1-3
VG-3 DON Quality Journey	1-4
VG-4 Video: "The Prophet of Quality - Part 1"	1-4
VG-5 Contributions of Dr. Deming	1-5
VG-6 Definition of Quality	1-5
VG-7 Dimensions of Quality	1-6
VG-8 Quality Depends On	1-6
VG-9 Conditions for Quality	1-7
VG-10 Customer and End-User	1-7
VG-11 Identifying Customers	1-8
VG-12 What is a Process?	1-8
VG-13 Examples of Processes	1-9
VG-14 Significant and Critical Processes	1-9
VG-15 Two Approaches to Quality	1-10
VG-16 Quality through Inspection	1-10
VG-17 Inspection Example	1-11
VG-18 Costs of Inspection	1-11
VG-19 Quality through Process Improvement	1-12
VG-20 Process Improvement	1-12
VG-21 Investments in Process Improvement	1-13
VG-22 The Chain Reaction in the DON	1-13
VG-23 Why Focus on Quality?	1-14
VG-24 Benefits of Focusing on Quality	1-14
VG-25 DON Definition of Total Quality Leadership (TQL)	1-15
VG-26 Total Quality Leadership Model	1-15
VG-27 Total Quality Leadership is:	1-16
VG-28 Total Quality Leadership is not:	1-16
VG-29 Videos: "TQL Welcome Aboard" and "TQL: A Marine Experience"	1-17
VG-30 Module Summary	1-17

## Lesson Objectives

At the end of this module the student will be able to:

- EO 1-1 Describe contributions of W. Edwards Deming to quality management.
- EO 1-2 Define quality.
- EO 1-3 Describe the different dimensions of quality.
- EO 1-4 Explain how the customer defines the quality of a product or service.
- EO 1-5 Define process.

## **Lesson Objectives (continued)**

- EO 1-6 Differentiate between significant and critical processes.
- EO 1-7 Contrast two approaches to quality.
- EO 1-8 Describe the chain reaction for quality improvement.
- EO 1-9 Describe benefits of quality.
- EO 1-10 Explain how the DON defines Total Quality Leadership.

## **Length of Instruction**

This module takes approximately 4.0 hours

# Fundamentals of **T**otal **Q**uality **L**eadership

Module 1  
DON Quality Approach

## Learning Objectives

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- ◆ Describe contributions of W. Edwards Deming to quality management
- ◆ Define quality
- ◆ Describe the different dimensions of quality
- ◆ Explain how the customer defines the quality of a product or service
- ◆ Define process
- ◆ Differentiate between significant and critical processes
- ◆ Contrast two approaches to quality
- ◆ Describe the chain reaction for quality improvement
- ◆ Describe benefits of quality
- ◆ Explain how the DON defines Total Quality Leadership

## DON Quality Journey

- ◆ Pilot projects started in mid 1980s
- ◆ Implementation approach developed (1989)
- ◆ DON adopted "Total Quality Leadership" (1990)
- ◆ DON develops Strategic Plan for TQL (1992)
- ◆ DON published Forward...From the Sea (1994)
- ◆ Implementation of the Leadership Continuum (1996)
- ◆ DON commands received TQL recognition from public and private sectors (1992 to present)

*Video...*

*“The Prophet of Quality”*

*Part I*

## Contributions of Dr. Deming

- ◆ Introduced statistical quality control to Japan in the 1950's
- ◆ Credited with having a major influence on Japan's economic recovery after World War II
- ◆ Led the third wave of the industrial revolution in the U. S.

## Definition of Quality

qual.i.ty (kwal e ti), n.

### Websters Dictionary:

- ◆ Peculiar or essential character
- ◆ An inherent feature or property
- ◆ A distinguishing attribute or characteristic
- ◆ The degree of excellence which a thing possesses

### DON Definition:

- ◆ The extent to which a product or service meets or exceeds customer requirements and expectations

## Dimensions of Quality

- ◆ Performance
- ◆ Timeliness
- ◆ Reliability
- ◆ Durability
- ◆ Aesthetics
- ◆ Personal interface
- ◆ Reputation
- ◆ Ease of use
- ◆ Features
- ◆ Consistency
- ◆ Uniformity
- ◆ Accuracy
- ◆ Conformance to specifications
- ◆ \_\_\_\_\_

## Quality Depends On:

- ◆ The context in which it is used
- ◆ The customer's perception
- ◆ The needs and wants of the customer

## Conditions for Quality

“The difficulty in defining quality is to translate future needs of the user into measurable characteristics, so that a product can be designed and turned out to give satisfaction at a price that the user will pay”

(Deming, 1986)

## Customer and End-User

- ◆ A Customer is a person or group who uses the output of a process
- ◆ An End-User is the ultimate user of a product or service

## Identifying Customers

*Leadership has the responsibility to:*

- ◆ Identify organizational customers
  - Combination of external and internal customers
- ◆ Develop meaningful dialogue with customers

## What is a Process?

- ◆ A series of operations or steps that results in a product or service
- ◆ A set of causes and conditions that work together to transform inputs into an output

## Examples of Processes

- ◆ Loading ordnance
- ◆ Dropping anchor
- ◆ Arranging travel
- ◆ Preparing a report
- ◆ Processing payments
- ◆ Admitting patients
- ◆ Starting propulsion equipment
- ◆ Purchasing supplies
- ◆ Plating metal
- ◆ Training people
- ◆ Preparing a budget
- ◆ Transporting hazardous materials
- ◆ \_\_\_\_\_

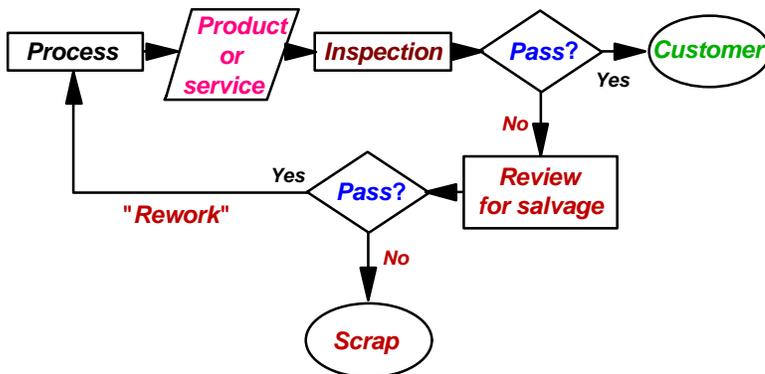
## Significant and Critical Processes

- ◆ Significant Processes
  - Are processes by which the mission-essential work of the organization is accomplished
  - Contribute directly to meeting the needs and requirements of customers
  - Can be traced from output (to external customer) back to input (to the organization)
- ◆ Critical Processes
  - A stage within a significant process
  - One that is deemed as most important for improvement

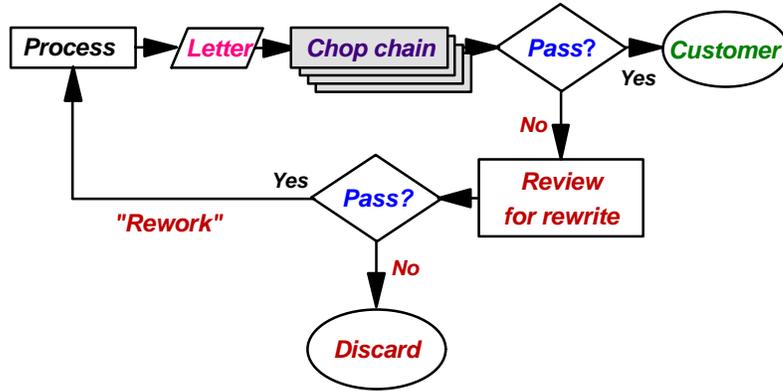
## Two Approaches to Quality

- ◆ **Quality through Inspection**
  - To detect and remove poor quality
  
- ◆ **Quality through Process Improvement**
  - To build in quality

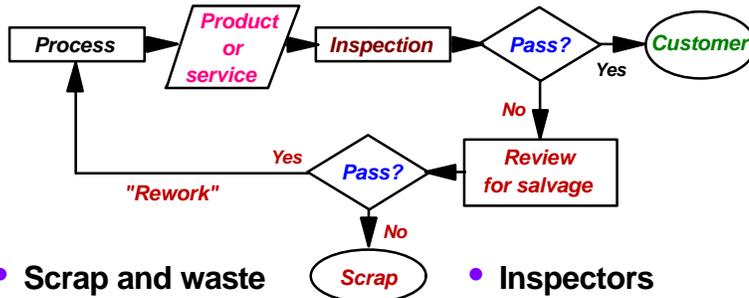
## Quality through Inspection



# Inspection Example

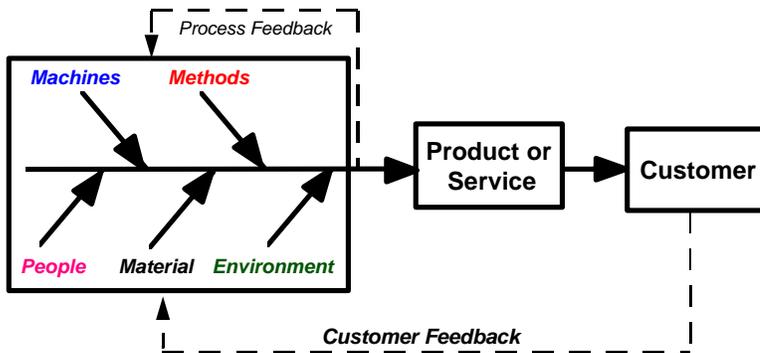


# Costs of Inspection

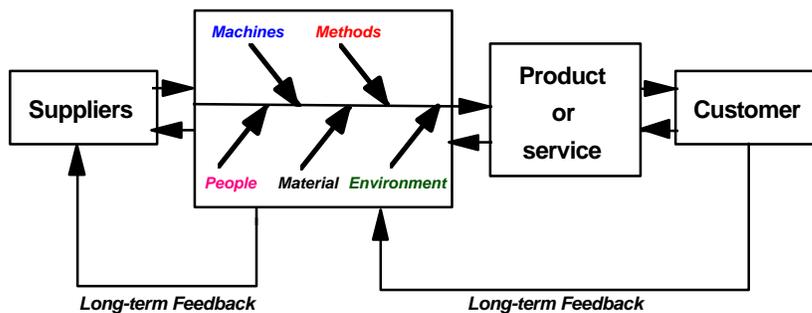


- Scrap and waste
- New material
- Time
- Delay
- Inspectors
- Employee burnout
- “Unknowable” costs

## Quality through Process Improvement

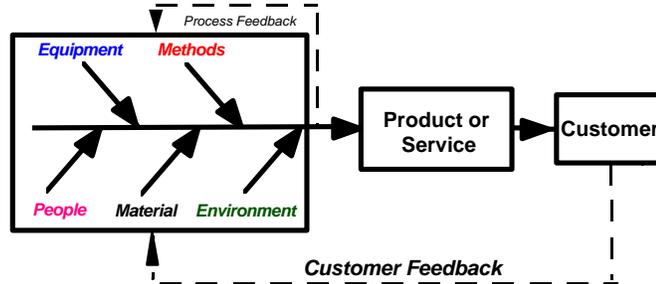


## Process Improvement



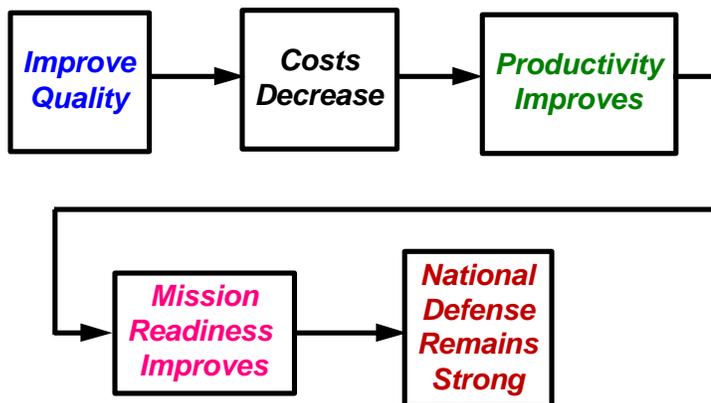
- ◆ A continual effort to learn about the cause system
- ◆ Process improvement is not problem solving

## Investments in Process Improvement



- ◆ Education and training
- ◆ Improving processes and systems
- ◆ Measurement and analysis
- ◆ Investment in innovation

## The Chain Reaction in the DON



(CNO TQL Teams, 1991)

## **Why Focus on Quality?**

- ◆ **The DON needs to maintain mission readiness**
- ◆ **There is a new direction for the DON**
- ◆ **The aim should be distinction in service**
- ◆ **TQL can help the DON meet the goals of the National Performance Review**
- ◆ **The U.S. needs to continue to improve its competitiveness in the world marketplace**

## **Benefits of Focusing on Quality**

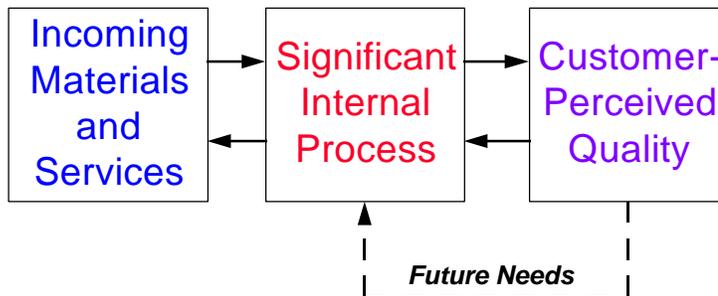
- ◆ **Improves operational readiness of our armed forces**
- ◆ **Improves organizational efficiency and effectiveness**
- ◆ **Eliminates waste, reduces costs, and increases productivity**
- ◆ **Enables everyone to make meaningful contributions to their work**

## DON Definition of Total Quality Leadership (TQL)

*The application of quantitative methods and the knowledge of people to assess and improve:*

- ◆ Materials and services supplied to the organization
- ◆ All significant processes within the organization and
- ◆ Meeting the needs of the end-user, now and in the future

## Total Quality Leadership Model



**Total Quality Leadership is:**

- ◆ *Leader-led*
- ◆ *Team-oriented*
- ◆ *Fact-based*
- ◆ *Customer-driven*
- ◆ *Quality-focused*

**Total Quality Leadership is **not**:**

- ◆ *Delegated*
- ◆ *Easy*
- ◆ *Just teams*
- ◆ *Just SPC*
- ◆ *Touchy-feely*
- ◆ *A program*
- ◆ *Maintaining the status quo*
- ◆ *A Japanese invention*

# *Videos...*

***“TQL Welcome Aboard”  
and  
“TQL: A Marine Experience”***

## **Module Summary**

- ◆ Quality has many dimensions and is difficult to define
- ◆ The customer defines quality
- ◆ Every product or service produced in the organization is the result of a process
- ◆ Process improvement is fundamental to total quality
- ◆ DON's chain reaction shows the relationship between quality and mission readiness
- ◆ DON has endorsed a new approach called Total Quality Leadership (TQL)