

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

Module 1
DON Quality Approach

Learning Objectives

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

- ◆ 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)

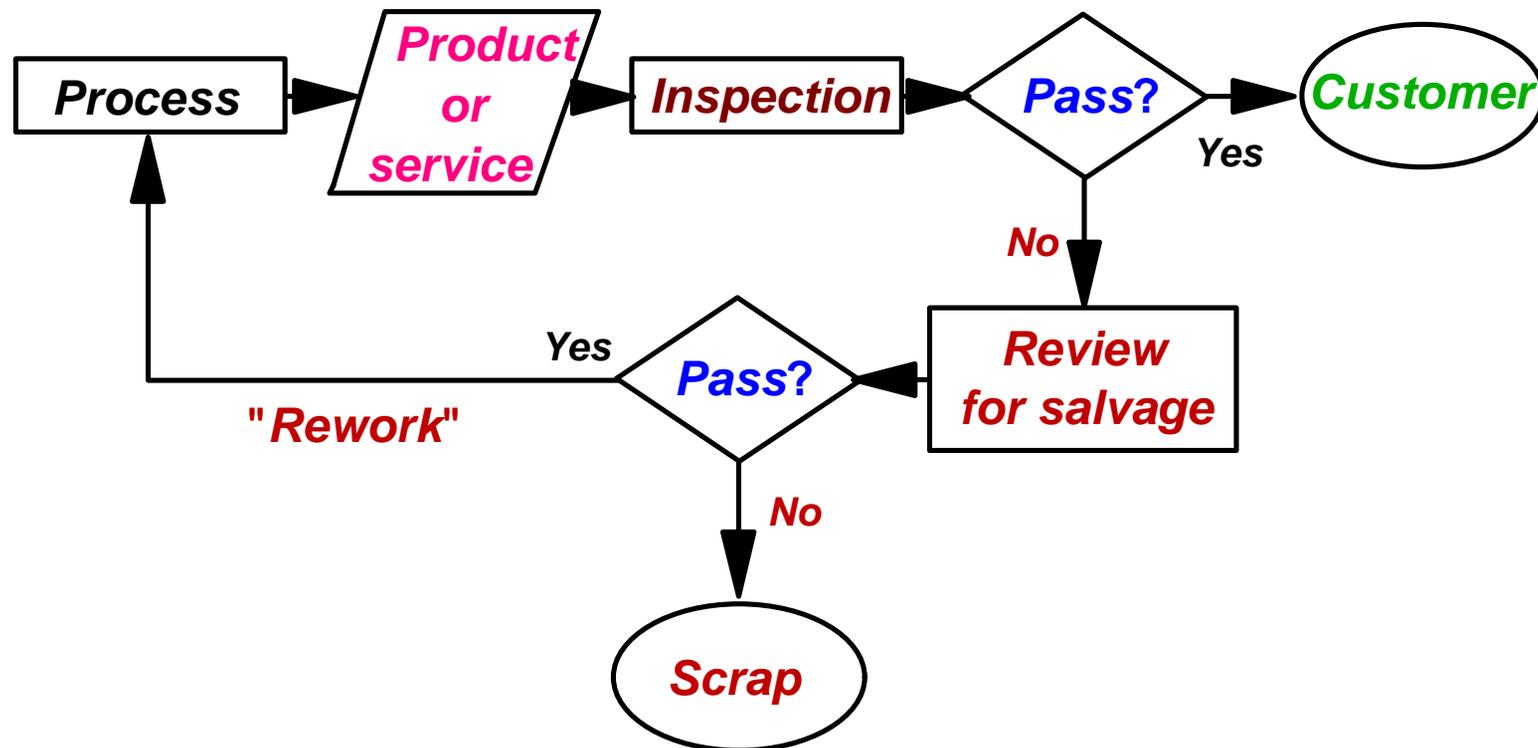
◆ Critical Processes

- A stage within a significant process
- One that is deemed as most important for improvement

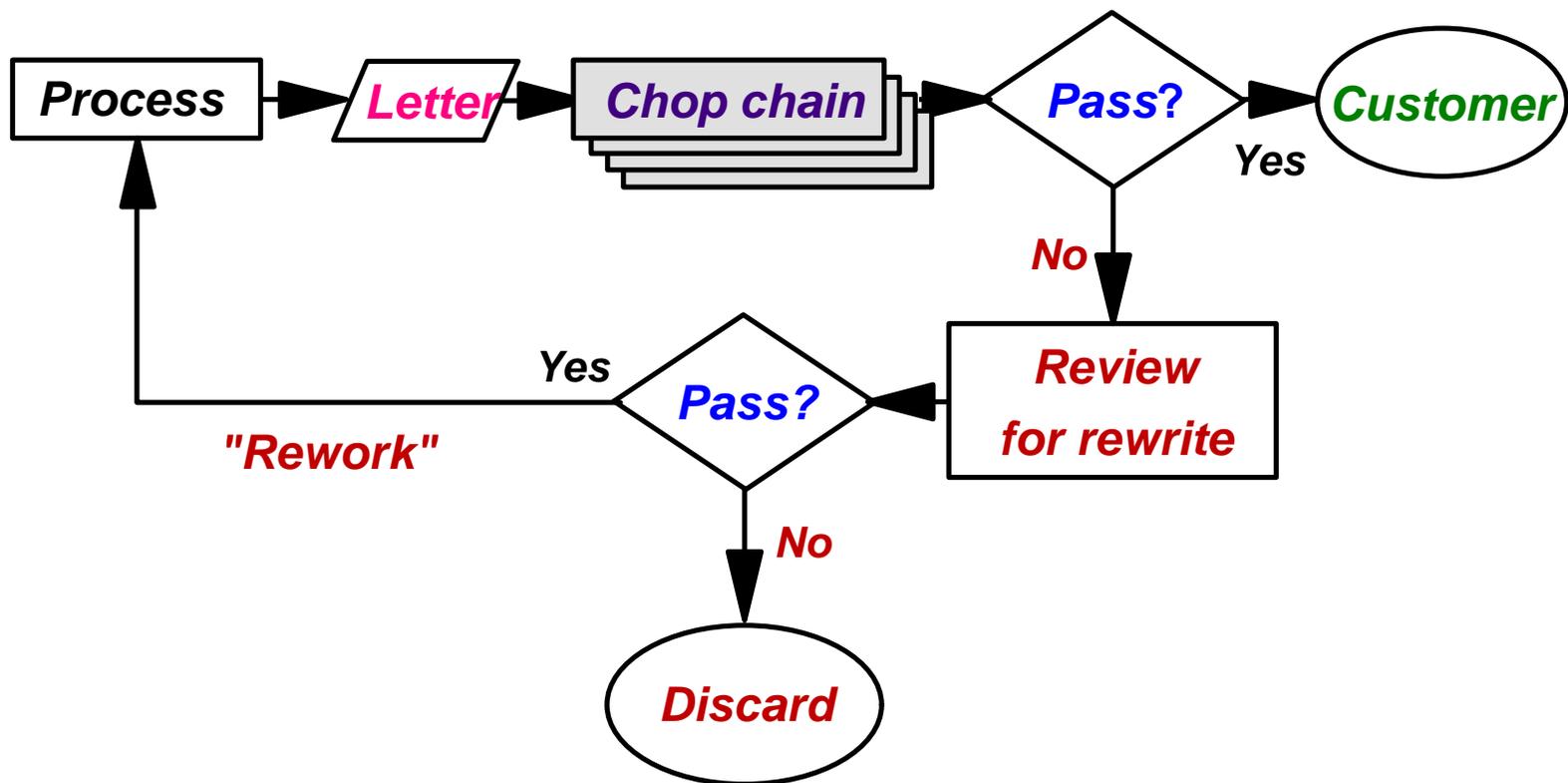
Two Approaches to Quality

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

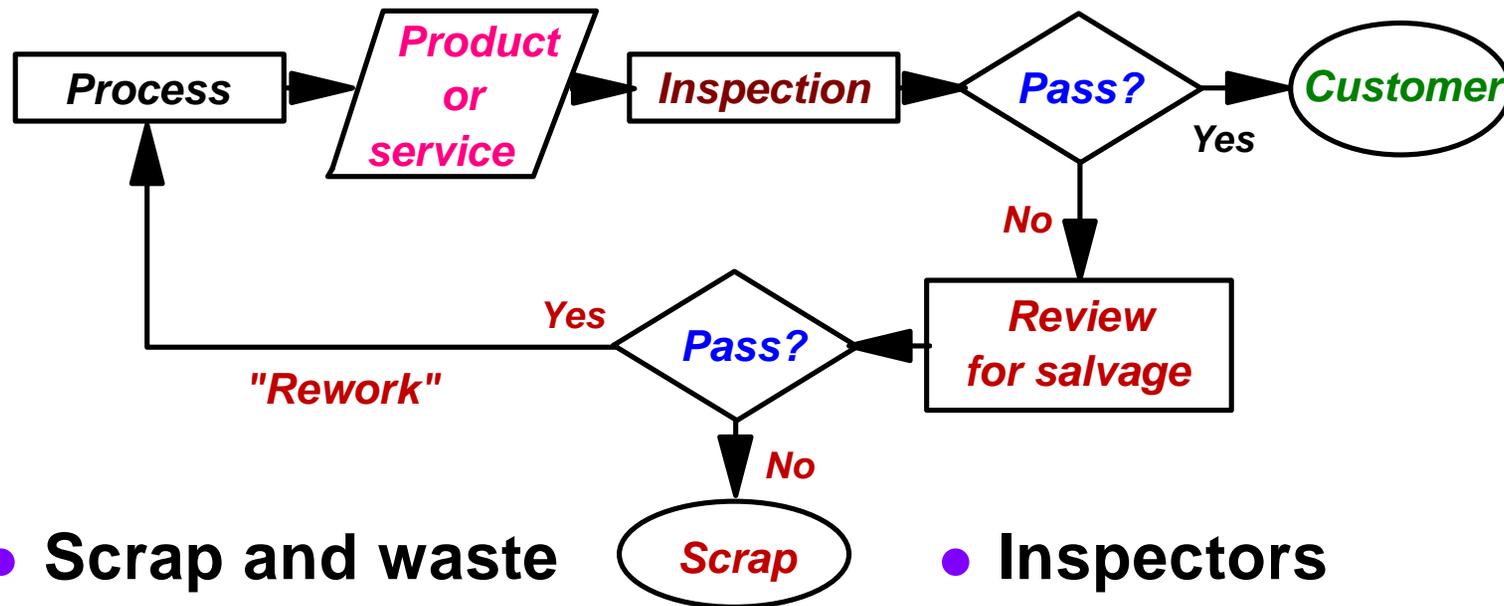
Quality through Inspection



Inspection Example



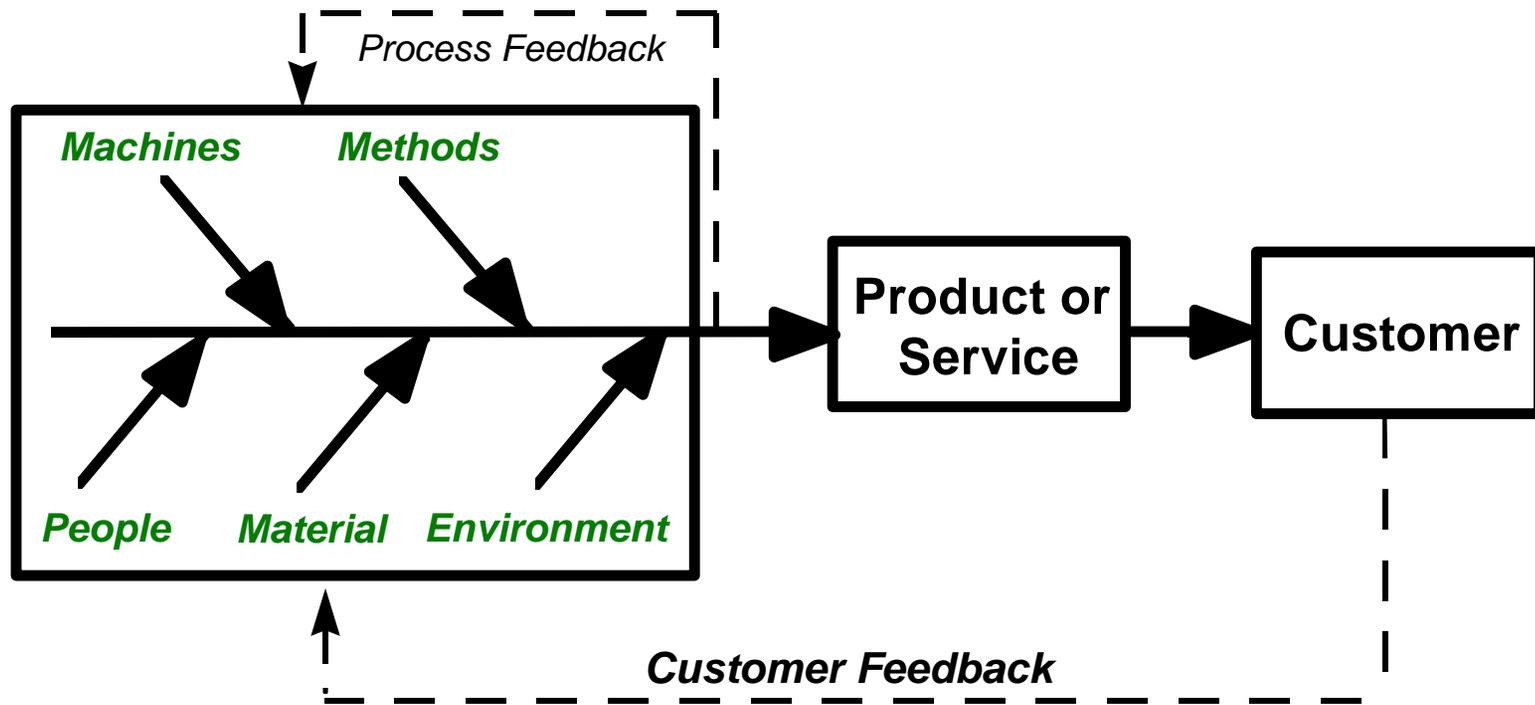
Costs of Inspection



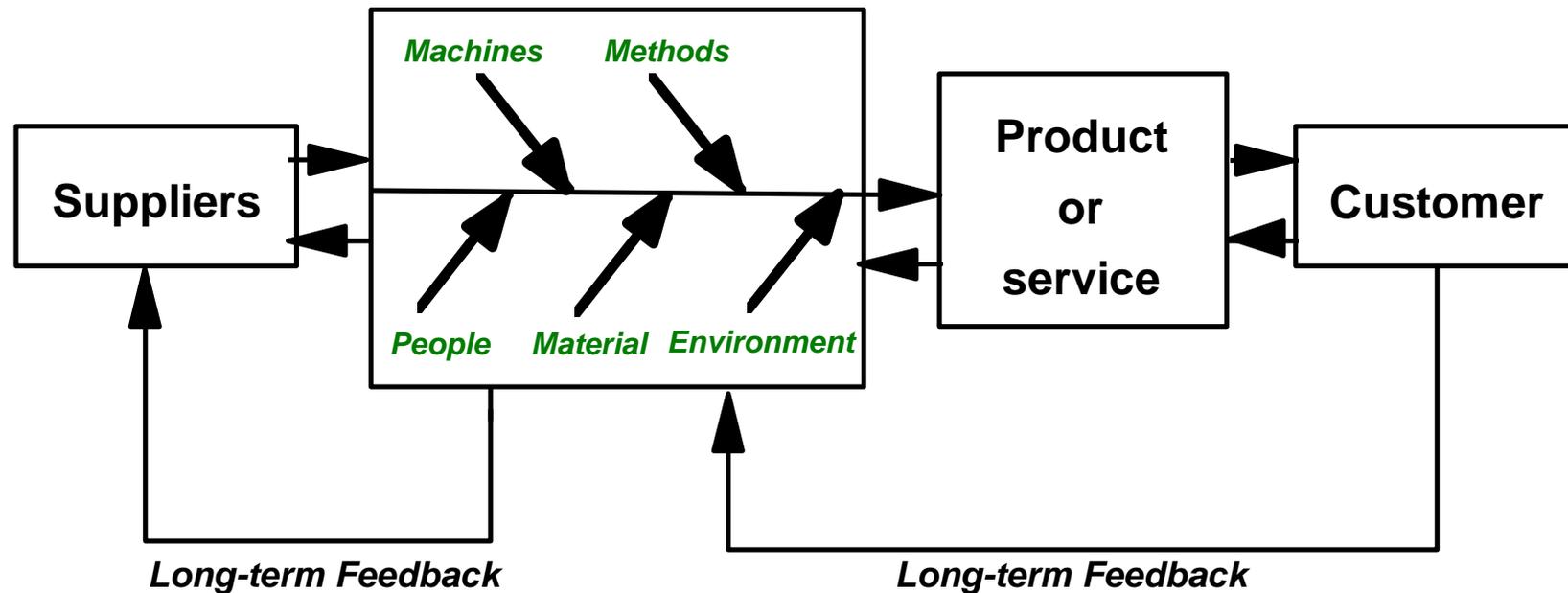
- Scrap and waste
- New material
- Time
- Delay

- Inspectors
- Employee burnout
- “Unknowable” costs

Quality through Process Improvement

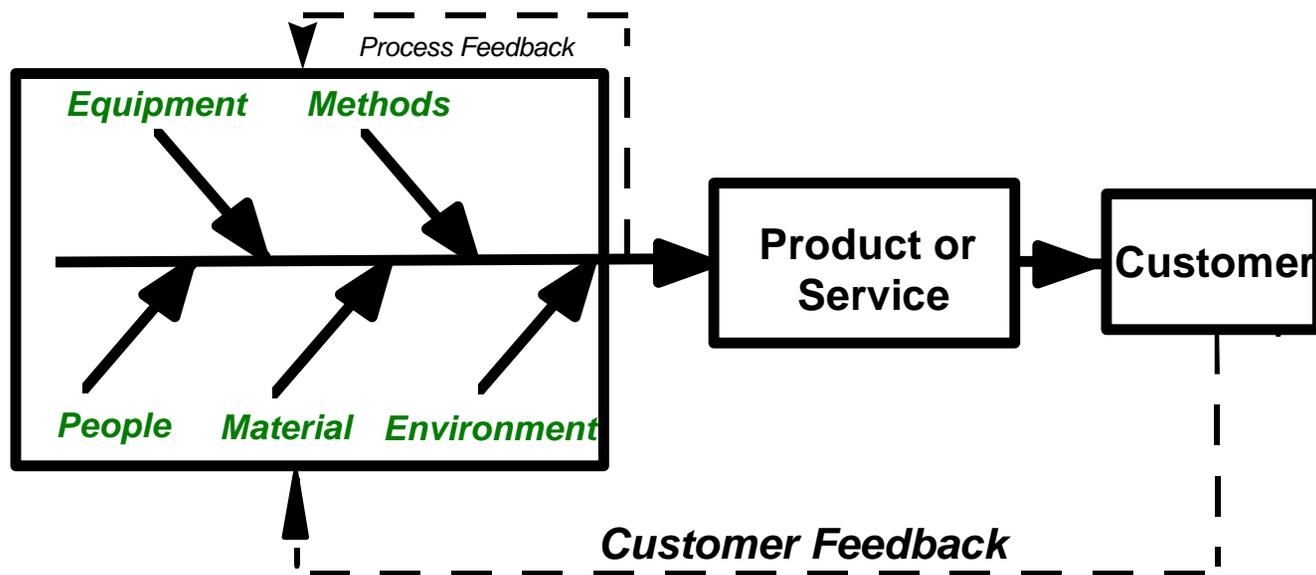


Process Improvement



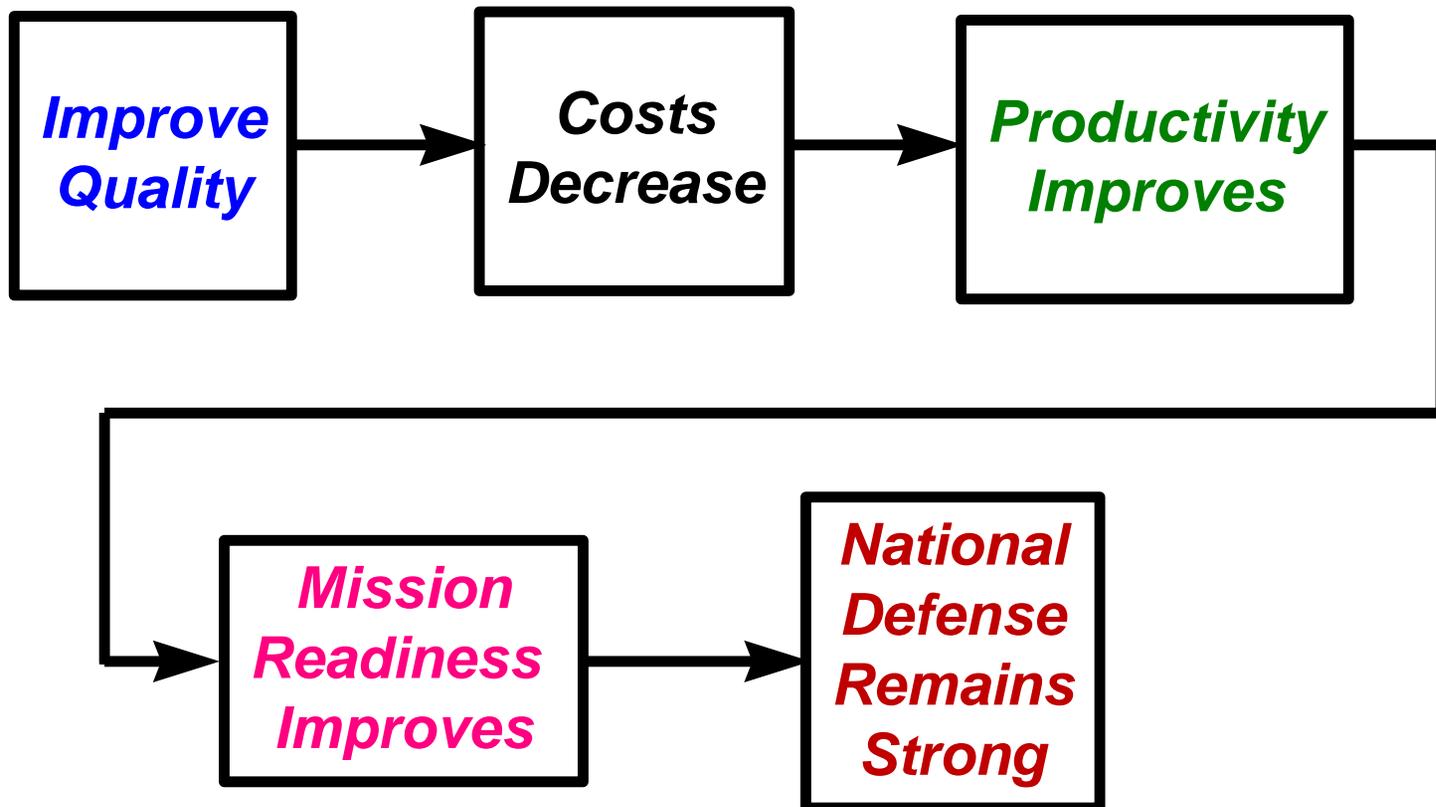
- ◆ A continual effort to learn about the cause system
- ◆ Process improvement is not problem solving

Investments in Process Improvement



- ◆ *Education and training*
- ◆ *Measurement and analysis*
- ◆ *Improving processes and systems*
- ◆ *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

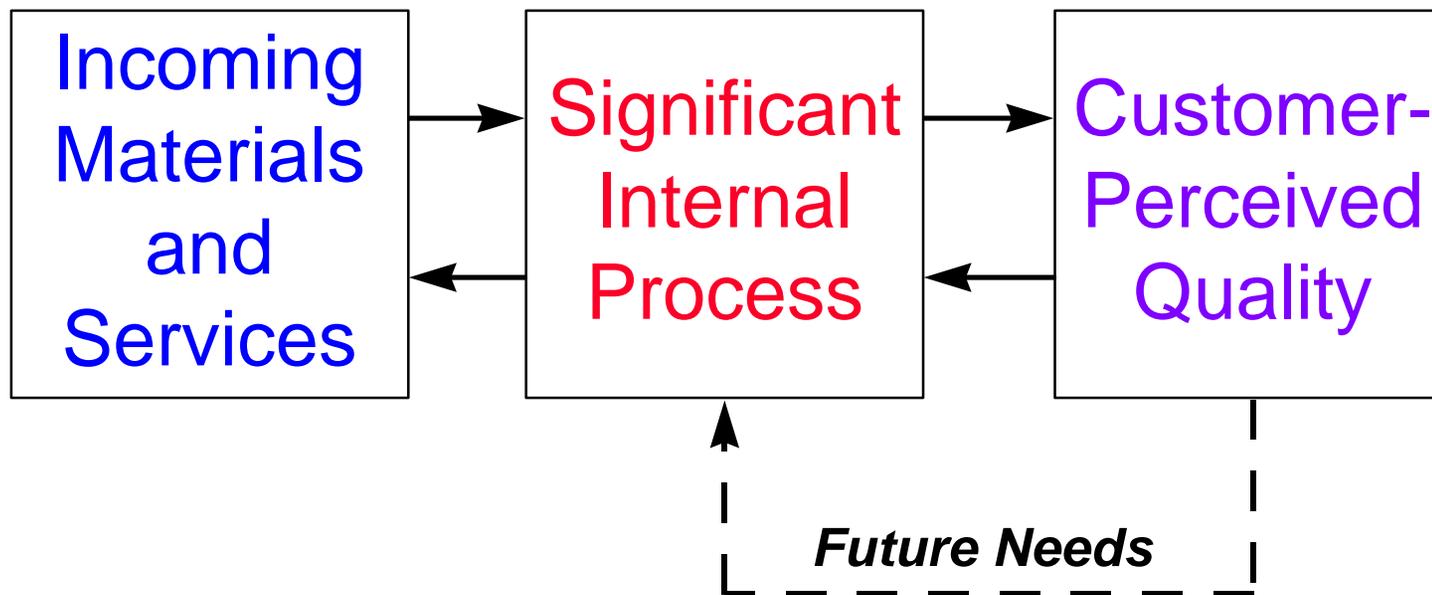
- ◆ Improves operational readiness of our armed forces
- ◆ Improves organizational efficiency and effectiveness
- ◆ Eliminates waste, reduces costs, and increases productivity
- ◆ Enables everyone to make meaningful contributions to their work

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)**