

Fundamentals of Total Quality Leadership

Module 3: System of Profound Knowledge

Lesson 4: Knowledge

Student Information

Lesson Outline

Student Information	3-4-1
VG-1 Theory of Knowledge	3-4-2
VG-2 Learning Objectives	3-4-2
VG-3 DON Approach to Quality Management	3-4-3
VG-4 Theory of Knowledge	3-4-3
VG-5 Typical Approaches to Planning and Decision-Making	3-4-4
VG-6 Quality Approaches to Planning and Decision-Making	3-4-4
VG-7 Management and the Theory of Knowledge	3-4-5
VG-8 Operational Definition	3-4-5
VG-9 The Plan-Do-Check-Act (PDCA) Cycle	3-4-6
VG-10 Plan Phase	3-4-6
VG-11 Do Phase	3-4-7
VG-12 Check Phase	3-4-7
VG-13 Act Phase	3-4-8
VG-14 PDCA Cycle and Process Improvement	3-4-8
VG-15 How the PDCA Cycle can be applied	3-4-9
VG-16 Where the PDCA Cycle can be applied	3-4-9
VG-17 Lesson Summary	3-4-10

Lesson Objectives

By the end of this lesson to the student will be able to:

- EO 3-19 Explain the definition of the theory of knowledge.
- EO 3-20 Explain effective planning and decision-making approaches.
- EO 3-21 Explain that planning and decision-making require prediction.
- EO 3-22 Describe the importance of operational definitions.
- EO 3-23 Describe the Plan-Do-Check-Act (PDCA) cycle.
- EO 3-24 Explain how the PDCA cycle provides a method for continual improvement.

Length of Instruction

This lesson takes approximately 1.0 hours

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

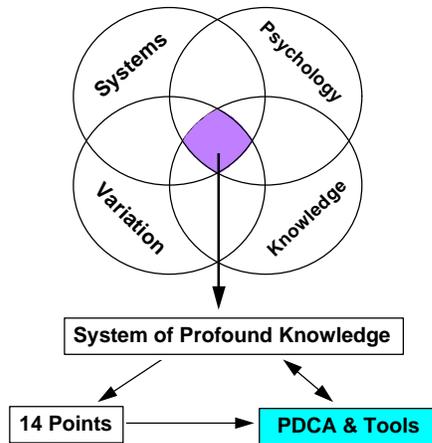
Module 3
System of Profound Knowledge
Lesson 4
Knowledge

Learning Objectives

By the end of the lesson the student will be able to:

- ◆ Explain the definition of the theory of knowledge
- ◆ Explain the effective planning and decision-making approaches
- ◆ Explain that planning and decision-making require prediction
- ◆ Describe the importance of operational definitions
- ◆ Describe the Plan-Do-Check-Act (PDCA) cycle
- ◆ Explain how the PDCA cycle provides a method for continual improvement

DON Approach to Quality Management



Theory of Knowledge

- ◆ Systematic approach to learning
- ◆ Knowledge is the only source of improvement and innovation



Typical Approaches to Planning and Decision-Making

- ◆ React to problems
- ◆ “Shoot from the hip”
- ◆ Form “tiger teams”
- ◆ Blame the workers
- ◆ Work around the system
- ◆ Take a short-term perspective



Quality Approaches to Planning and Decision-Making

- ◆ Plan for improvements
- ◆ Make data-based decisions
- ◆ Pursue continuous process improvement
- ◆ Improve processes
- ◆ Improve the organizational system
- ◆ Take a long-term perspective

Management and the Theory of Knowledge

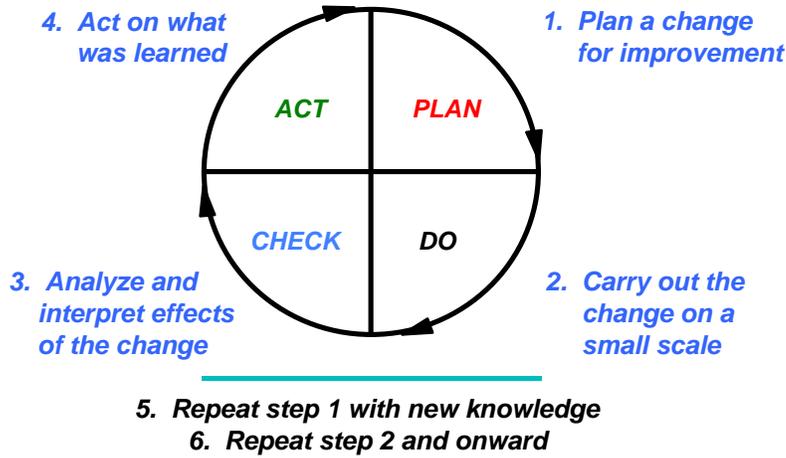
- ◆ Management must be able to predict the future
- ◆ Prediction requires knowledge
- ◆ Theory is required to increase knowledge
- ◆ Knowledge comes from applying the scientific method



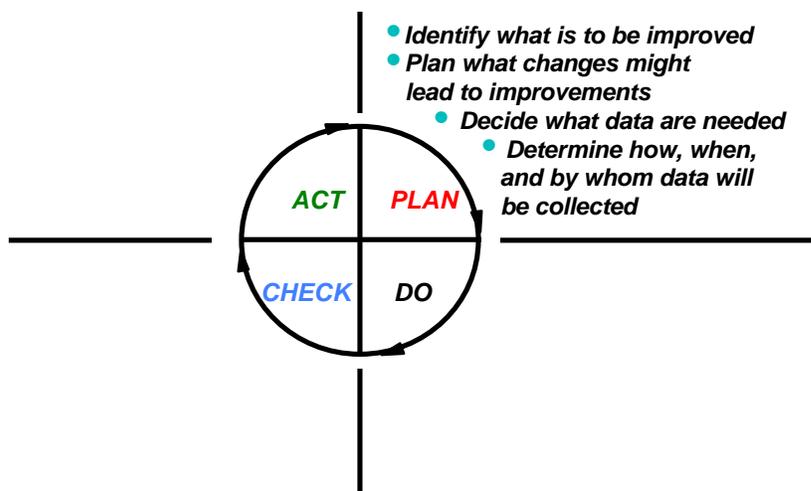
Operational Definition

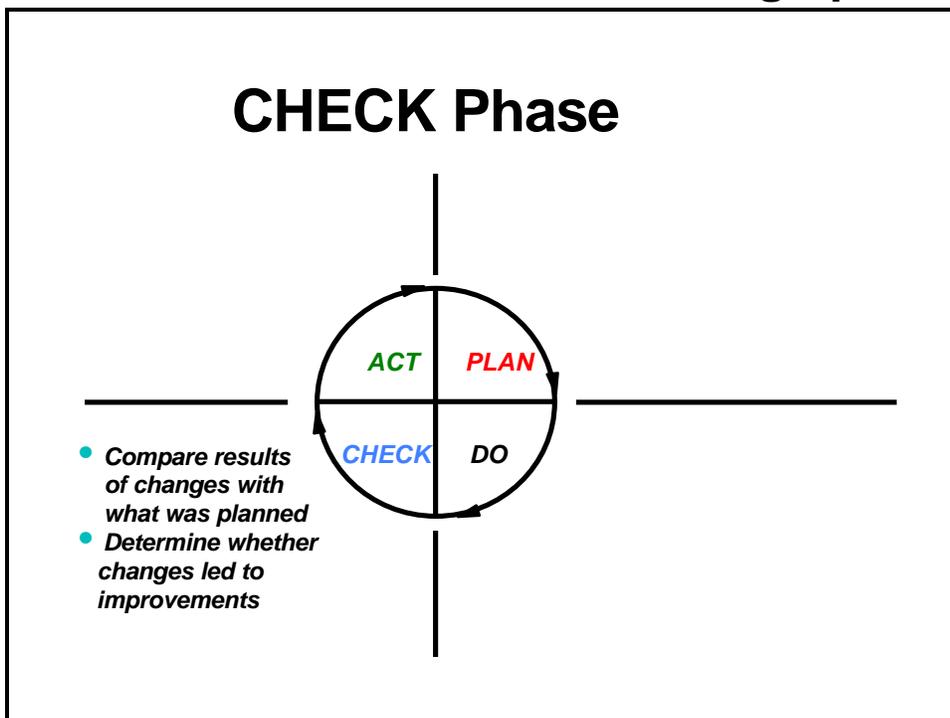
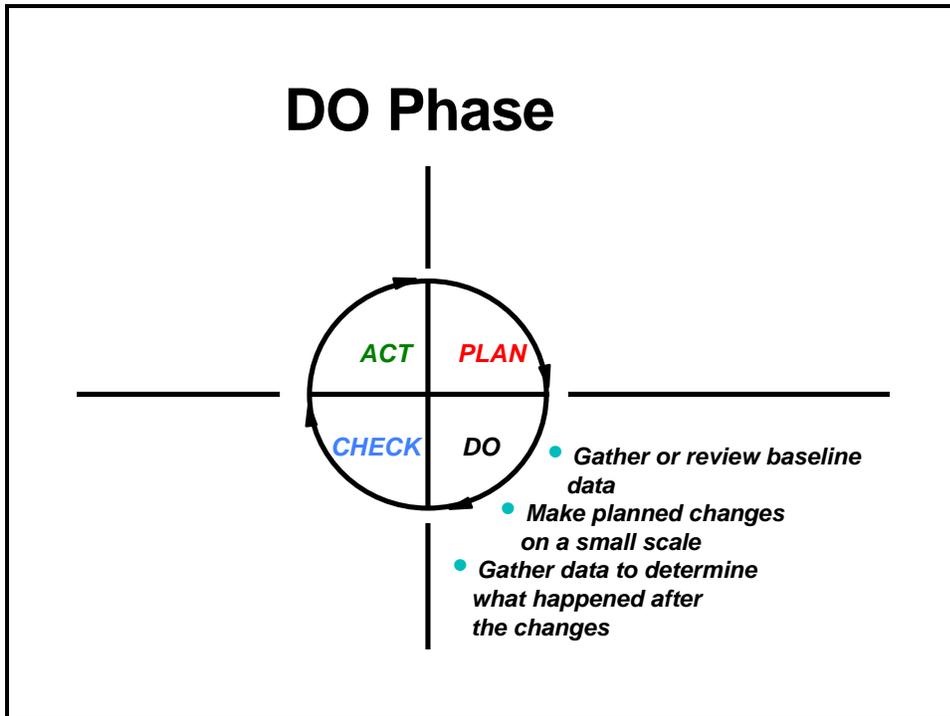
- ◆ Give communicable meaning to a concept by specifying how the concept is measured and applied within a particular set of circumstances
- ◆ Operational definitions have three elements:
 - Criterion
 - Test
 - Decision

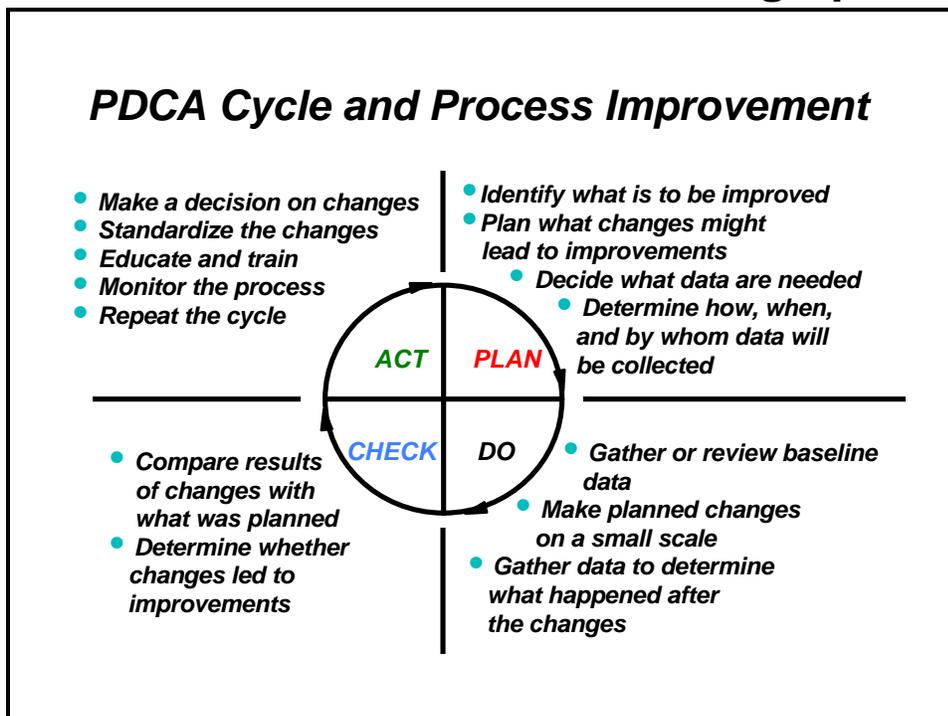
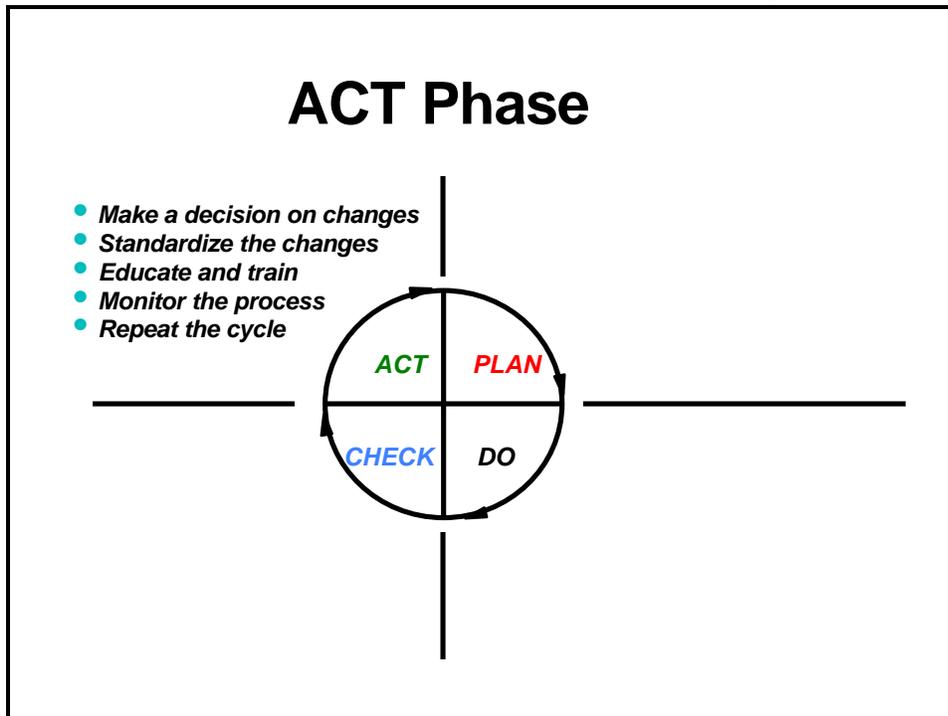
The Plan-Do-Check-Act (PDCA) Cycle



PLAN Phase



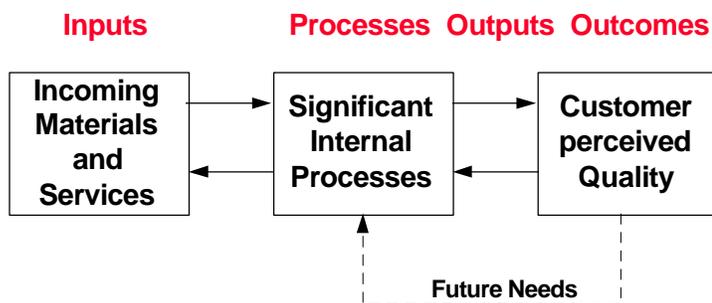




How the PDCA Cycle can be applied

- ◆ Improve existing products and services
- ◆ Improve existing processes
- ◆ Innovations in products, services, and processes

Where the PDCA Cycle can be applied



Lesson Summary

- ◆ **The theory of knowledge is an integral part of the System of Profound Knowledge**
- ◆ **A total quality approach must replace typical approaches to planning and decision-making**
- ◆ **Planning and decision-making require prediction and prediction comes from knowledge**
- ◆ **Operational definitions are required**
- ◆ **The PDCA cycle provides a scientific method for increasing process knowledge**
- ◆ **Knowledge guides us in the improvement and innovation of processes, products, and services**
- ◆ **Continuous process improvement is required to increase quality**